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Enteres

**AN OUTLINE OF CHRISTIANITY:
THE STORY OF OUR CIVILIZATION**

**VOLUME FOUR
CHRISTIANITY AND MODERN THOUGHT**

GENESE OS

caelum et terram. Terra autem erat in
aquis et tenebrae super faciem abyssi.
Et spiritus dei ferebatur super aquas. Dixitque deus:
Fiat lux. Et facta est lux. Et vidit deus lucem
quod esset bona: et diuisit deus lucem a tenebris:
et appellauitque lucem diem: et tenebras noctem.
Factumque est uesper et mane dies unus.

Dixit quoque deus: Fiat firmamentum in me-
dio aquarum: et diuidatae aquae a aquis. Et fe-
cit deus firmamentum. Diuisitque aquae quae
erant sub firmamento: ab his quae erant su-
per firmamentum. Et factum est: ita uocauit
que deus firmamentum caelum. Et factum est
uesper et mane dies secundus.

Dixit uero deus: Congregentur aquae quae
sub caelo sunt in locum unum: et appareat
arida. Factumque est: ita. Et uocauit deus aridam
terram: congregationesque aquarum appella-
uit maria. Et uidit deus quod esset bonum: et ait
Germinet terra herbam uiuentem: et facien-
s semen: et lignum pomiferum faciens fructum
iuxta genus suum: cuius semen in semet ipso sit super
terram. Et factum est: ita. Et protulit terra herbas

THE BOOK OF GENESIS.

(From the Manuscript of "Alcuin's Bible," in the British Museum.)

An Outline of Christianity The Story of Our Civilization

Edited by

A. S. PEAKE, M.A., D.D.

R. G. PARSONS, M.A., D.D.



IN FIVE VOLUMES

Illustrated in Colour and in Black and White

VOLUME FOUR

CHRISTIANITY AND MODERN THOUGHT

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INTRODUCTION

RELIGION AND SCIENCE

BY THE VERY REV. WILLIAM RALPH INGE, C.V.O., D.D.

THE conflict of Science and Religion is still a long way from being reconciled. It is an open sore which poisons the spiritual life of the civilized world. It is difficult for a man to accept orthodox Christianity as the Churches present it to him without treachery to his scientific conscience. The injury thus inflicted upon religion can hardly be measured. Intellectual honesty is, to a large extent, strained out of the Church, and public opinion within it does not reflect either the best knowledge or the most candid temper of the community.

The problem is as old as the beginning of unfettered thought. Philosophy, which is the complete honesty of the intellect with itself, began in Ionia with purely theoretical interest, independent of the popular religious cults. It is significant that in the whole of classical literature there has survived no work by a priest, unless indeed we remember that Julius Cæsar, a notorious agnostic, was supreme pontiff! But in the later period philosophy gradually passed under the power of practical human needs. In the post-Aristotelian schools philosophy became more and more a rule of life, a refuge for the individual from a hostile world, and at last a spiritual religion. Scientific investigations decayed, and while they were in abeyance something like a synthesis of faith and reason was effected by the Neoplatonists and the Christians who carried off their honey to their hives. The schoolmen of the thirteenth century effected another reconciliation, but still more decidedly with science left out, and with philosophy in fetters as the *ancilla theologiæ*. At the Renaissance nature-study again asserted itself; but the Church felt too strong to make concessions, and so science, from Copernicus and Galileo downwards, found itself in continual conflict, not with

Christianity, but with blocks of antiquated physics and astronomy which had been used to build up the fabric of dogmatic theology. As knowledge increased, the cleft between science and tradition became wider, till the two confronted each other as irreconcilable enemies. Philosophy, of course, ought to have been the mediator, and to some extent was so; but philosophy itself was involved in the dualism. For example, Descartes and many of his successors maintained that thought functions quite independently of the brain, and *therefore* reveals the independently real. This dualism of the sensuous and the conceptual had a long and unfortunate dominance.

Since Kant, the idea of *value* has been fundamental, and the conception of intrinsic value dominates the whole conflict between idealism and naturalism. But Kant, though he subordinates "the frame of nature" to the realm of ends, built up by the good will as the absolute value, nevertheless makes values rest on subjective conviction, while "knowledge" is only of forms. Even Lotze says: "To our human reason a chasm that cannot be filled, or that has not been filled, divides the world of values from the world of forms. With the firmest conviction of the undivided unity of the two we combine the belief in the impossibility of this unity being known." Unfortunately, we have to unify them somehow, if we are to live rationally. Dualism is never more than a half-way house. The unity of our own personality compels us to adopt some kind of monistic theory.

The philosophy of Spencer, Huxley, and others in their time was a queer blend of subjectivism and mechanicism. The two would never combine. Either the agnostic subjectivism dropped out, leaving dogmatic materialism, with a floating haze of inert "epiphenomenal" mind-products hovering over it, or the Unknowable insensibly took to itself attributes, and became the supreme object of mystical contemplation. This may be said to have happened both to Spencer's Unknowable and to Hartmann's Unconscious. They both point, strangely, towards Neoplatonic mysticism.

It is worth noticing that even science, apparently so detached from practical interests and political aspirations, has been deeply coloured by the prevailing ideas of the time. Lamarckism seems the most appropriate natural philosophy for a generation which proclaimed the *carrière ouverte aux talents*—the age when every French soldier was said to carry a field-marshal's baton in his knapsack. The doc-

trine of natural selection belonged to the age of unchecked industrial competition, when the devil or the workhouse was waiting to take the hindmost. To-day the tendency, outside of science, is towards an anarchical universe and free experiment. In science this is reflected in the revolt of biology and psychology against mechanism, in the repudiation of determinism, and in a widespread reaction against the favourite scientific theories of the last century, including even Darwinism. It is very difficult to be unbiased by the ideas which are swaying the minds of our contemporaries.

This reaction against naturalism or mechanicism, even within the ranks of natural science, is one of the most remarkable phenomena of the day, but its importance is very difficult to gauge. Aliotta has reviewed all the forces of the coalition in his "Idealistic Reaction against Science." Feeling, will, imagination—every obscure and primitive instinct—have invaded the temple of Reason. Discredited superstitions—theosophy, necromancy, spiritualism—have lifted up their heads again. A Neo-Catholicism which prides itself in believing in all kinds of miracles, ancient and modern, has sprung up, and flouts the idea of uniform natural laws. It seems sometimes as if we were reverting to a pre-scientific age. The French philosophers, Bergson, Le Roy, Boutroux, etc., try to prove that there is nothing objective in facts, laws, or scientific theories. Paulsen, late professor of philosophy at Berlin, declared that "Science, by reason of its poor practical results, must be looked upon as a thing of the past; the future lies open to faith." The Pragmatists give us leave to believe what we choose, at our own risk.

If these attacks were confined to metaphysicians, science would perhaps ignore them. But disintegration is in progress from within. The aim of nineteenth-century natural philosophy was to reduce all qualitative change to quantitative; to find the simplest possible unitary formulas under which everything in the universe could be brought. Hence the priority given to mathematics and physics as the type of pure scientific method. Teleology was displaced by the theory of blind invariable sequence, wrongly called causation, and every tree was to be known by its roots, not by its fruits. Mind must be made commensurable with matter; and as no mode of measuring thought can be found, mind was practically banished out of the scheme. Against this reduction of mind to body, of life to the inanimate, of psychology to physiology, biologists and psychologists

now alike revolt. They point out that this theory is not pure science, but a jejune and abstract philosophy built upon mathematics and physics. Those who wish to maintain the supremacy of the spiritual, of all that religion stands for, have always felt—and rightly—that they cannot come to terms with this purely quantitative method. All the imponderables, which are the most real things in the world, slip through its meshes and are lost.

The present wave of irrationalism is best regarded as a reaction against an inadequate theory of the universe. These movements and counter-movements, both pushed to extremes, are no new thing in the history of thought. The Sophists opposed an antinomian subjectivism to the intellectualism of the pre-Socratic philosophy. Tertullian set his "*credibile est quia absurdum*" against the rationalistic mysticism of Alexandria. Among the schoolmen, Dun Scotus maintained that "*Voluntas Imperans Intellectui est causa superior respectu actus eius*," against the "*simpliciter intellectus est nobilior quam voluntas*" of Thomas Aquinas. After Ockham's scepticism came a revival of Neoplatonic metaphysics in Eckhart. Spinoza attempted to interpret even the moral life "*more geometrico*"; and we see the reaction in æstheticists like Shaftesbury. Hegel and Schopenhauer were at open war in the same university. The victory of materialism and mechanicism seemed to be complete in the middle of the nineteenth century; but the triumph was short.

Spencer's psychology of biological adaptation prepared the way for reaction. May not all our scientific beliefs be, like our sensations, merely adaptations to environment? Have they any validity except in helping us to live? It further became plain that the two theories of mechanism and of evolution are incompatible. Mechanism contradicts the fact of change. A machine can generate nothing new. This difficulty was disguised by postulating only very small and gradual evolutionary changes, a defence which to a philosopher was as absurd as the apology of the servant girl for a baby whose appearance needed apology, that it was a very small one. Change is change, whether it is rapid or slow, and it is very difficult to account for on the hypothesis of naturalism. Only the permanent can change; and naturalism has no place for permanence.

Before the end of the century the Darwinian doctrine of natural selection was hotly assailed; and Weismann's dogma that acquired characteristics are never inherited has been continually called in

question; nor do the heretics show any sign of being driven from the field. And observe that all the anti-Darwinian theories are teleological. There has been a distinct reaction towards the speculations of Lamarck, modified, of course, by later knowledge. De Vries' theory of saltatory mutations gives an alternative explanation of the origin of new species, and one which pleases the revolutionary optimism of the day. Many are willing to postulate "direct psychical factors" in physical changes. There is, they say, a tendency to progress innate in the organism itself.

In my opinion the dispute about teleology—the doctrine of final causes—is a dispute about nature's *methods*; I do not think religion is vitally concerned in it. It is a quarrel between two scientific theories, the Aristotelian theory that the "nature" of anything is to be found in its completed development, and natural selection. The theory of final causes, it has been pointed out, is an *asylum ignorantiae*; it states the problem without explaining it.

But this last objection will carry us far. Some have said that all science is merely descriptive; that it explains nothing. Scientific laws are not forces or causes. When science boasts that it has explained a phenomenon, it generally means only that it has reduced it to a simpler principle. But even if it reached its ideal consummation, and found a unitary formula under which everything could be brought, the evolution of heterogeneity and diversity from unity would still remain a mystery. Attraction and repulsion are metaphors which explain nothing.

It may be answered that the search for general laws is not merely descriptive, but is an attempt at explanation. The answer is true; but it leads us rather farther than some naturalists would wish to go. The search for general laws is not merely descriptive, because it is a search for *values*. And here I think we come to grips with the dualistic theories of mind and matter which we have already touched upon.

Valuation is as much a fact of our nature as sense-perception, and cannot be separated from it. If we think the matter out, there is no fact without a value, and no value that is not a fact. All that we perceive, we perceive as having value. Unity and conformity to law are part of one of the ultimate values, inherent as ideals in our minds. The statement sometimes made that science observes facts without valuing them is untrue, and it introduces great difficulties into

philosophy because it seems to justify the error that it is possible to build up a world by purely quantitative standards. All knowledge is of the *quality* of existents. But judgments of quality are related to universal standards which are part of the texture of the mind. I think it very important to insist that the world as known to science is just as much a kingdom of values as the world known to religion. The difficulty is that the values are not the same.

I shall assume as proved that there are three ultimate values and three only—goodness, truth, and beauty. I will quote in support of this two passages, from philosophers who are not at all in close agreement—Bradley and Windelband. Bradley says: "Goodness, beauty and truth are all there is which in the world is real. Their reality, appearing amid chance and change, is beyond these and eternal. But in whatever world they appear, that world so far is real." And Windelband: "Logical, ethical and æsthetic values make up the entire range of the human value-activity which can lay claim to general recognition and the necessity of actual unconditionedness. In each of these provinces the valuation of the empirical mind has a significance which transcends the mind itself. . . . In its metaphysical significance it is a rational community of spiritual primary reality that transcends all experience. There can be, as regards content, no further universal values beyond these three, because in these the entire province of psychic activity is exhausted."

These three, then, goodness, truth and beauty—the order in which we put them is immaterial, since they are a triple star, or three sisters, "never to be sundered without tears," as Tennyson says, but never to be fused or subordinated one to another—these three are the attributes under which we know God and the world. What we call the ideal is the presence of God in the soul. We are closest to true knowledge when we can see and feel these attributes of God without us and within.

It is, no doubt, extremely difficult to harmonize the thought of the world as a kingdom of values with the thought of the world as an assemblage of things. The difficulty is proved by the failure of one philosophy after another to preserve them both. Either the kingdom of values fades into a dream of unfulfilled ideals, the realm of that which ought to be but is not, or the world of things evaporates into mere appearance.

But we cannot be satisfied with either of these attempts to get rid of the dualism. The ultimate values must be supremely real. If there is no absolute reality there can be no philosophy and no relativity, since relativity depends on a background which is unconditioned. The existence of an eternal spiritual world is rigorously involved in the nature of valuation as soon as we rise above individual and historical relativity. And it is demanded by an experience which is as real as any other. Religion especially demands that the object of its adoration shall be conceived as a living Power, existing eternally, independent of time, in its own right. On the other hand, all subjective idealism is wrecked on the fact that our consciousness asserts positively that the objects of sense, however much they may be transformed in passing through our minds, are themselves non-mental. If we cannot trust this testimony, it seems to me that we can trust nothing.

It is worth while to remind ourselves, as against Voluntarists and Pragmatists, that there are values which are free from desire and expectation. It is here especially that we encounter intrinsic and absolute value. Such are the æsthetic values, and, as Schopenhauer rightly added, those of science no less than those of art.

The place of religion, art, and intellectual activity in any comprehensive view of reality is therefore much more secure than that which the thinly disguised materialism of the nineteenth century allowed to them. A scheme which leaves out the ultimate values is even ludicrously inadequate; it is fatal to science itself. The division of reality into the purely mental and the purely mechanical leaves nothing on either side of the line.

The impossibility of making a coherent and intelligible world out of naturalism is disguised by the tendency of naturalism in practice to develop into pantheism. It may even become devout while reflecting on the Divine immanence. But this poetical, mystical, half-animistic naturalism, which bears witness to the impossibility of keeping out the absolute values which are implicit in science itself, or at least in the mind of the scientist, does not satisfy the devotees of mechanism, whose object, as I have said before, is to reduce everything to quantitative measures, such as it finds in physics and chemistry. Mechanism decked out with animistic ideas may be an attractive creed for the unthinking, but it is a patchwork of two incompatible theories.

Let us next inquire what are the minimal demands which religion makes. It demands a meaning and purpose in the world-process; or perhaps it would be content with an infinite number of finite purposes, since it is not bound up with the theory that history has a beginning, middle and end. But it insists that its values are being actualized, imperfectly no doubt, in time. Next, it demands that the whole world shall depend on a power above the world. The notion of a God who is realizing Himself in the time process, an imperfect God who is only coming by degrees into His own, is not and never can be satisfactory to the religious mind. The God of religion must be transcendent. That this, the theistic hypothesis, is more difficult to accept than, for example, the Hegelian deity, I cannot agree. Theism seems to me to be beset with fewer difficulties than any other creed. Perhaps we ought to add a third claim of religion which has lately been emphasized in Germany by Heiler and especially by Otto, that room must be found for the conception of the *Holy*. The awe, reverence, and attraction which the soul feels for the supreme mystery behind existence is, as Otto says, an irreducible factor in human experience; it is the source of the devotional life. A Frenchman has said, "Un Dieu défini est un Dieu fini." We should instinctively distrust a theory which accounted for everything without remainder. ("*Omnia exeunt in mysterium.*") Otto partly spoils a valuable argument by speaking repeatedly of this specifically religious consciousness as "irrational." It is not irrational, because there is a sound reason for distrusting a theory which explains everything perfectly from imperfect premises. Otto is really justifying mysticism, which can give a very good account of itself on rational or intellectual grounds, as Plotinus proved once for all.

The original of the psychical is hidden from us, but it is never really a function of bodily development, and as it grows it becomes more independent, and seems to breathe naturally in the atmosphere of the spiritual world. Here again we are on the bedrock of experience, and it is safest on the whole to believe that the experience of the divine is actually what it thinks itself to be.

There can be no treaty between religion and science to leave each other alone. The world as known to science is no doubt "appearance," not "reality." This means in the first place that, as judged by the triumvirate of the absolute values, it is defective. It does not

include or account for all relevant facts. Secondly, we know that science has to make its synthesis from very inadequate physical data. We see only a few colours; we hear only a few sounds, and so on. Thirdly, we do not get our idea of natural law from nature, but we find it reflected in nature. But nevertheless, "the shadow is a true shadow, as the substance is a true substance." And I have already shown that the world of science is itself a kingdom of values. For this reason, if we try to construct a religion without reference to what we know of the behaviour of nature, or in contradiction of what we know of that behaviour, our religion will be fatally impoverished or distorted.

And if idealism without science is mutilated, science without idealism is involved in insoluble difficulties. We need only point to the familiar antinomies of time and space. Are they infinite or are they not? The two alternatives are perhaps equally demonstrable and equally refutable. Personally, I incline to the belief that time and space have no beginning and no end. Neither time nor space, I believe, belongs to the eternal world, but the physical world is perpetual, as God is eternal, boundless, as God is infinite. But religion is not vitally concerned in this problem. A similar difficulty besets science in the law of "entropy," which demonstrates that the universe is running down like a clock. This alarming prospect really points to a Creator; for if the universe is running down, why did it not stop long ago? It must have been wound up at some particular date, and whatever power wound it up once may presumably wind it up again.

The question of miracle, for many, is the meaning of the conflict between religion and science. A few remarks on this subject will therefore not be out of place.

It might seem easy at first sight to distinguish between myth or legend, and their spiritual and moral content. But every form of religion involves a theory of the universe, which seeks to account for all facts relevant to religion, from whatever source they are derived. Supernaturalism, the theory of occasional divine intervention, is a very old method of dovetailing the spiritual into the natural, and so preserving both. The religious motive is to find in experience three things which it values—evidence of divine providence, of the dependence of the natural order on the will of God, and of the mysteriousness which, as we have seen already, is part of

the demand of religion. The error, as it seems to modern thinkers, is to seek this evidence in isolated and exceptional acts, as if there were two forces at work, nature and super-nature. This theory would obviously reduce all the sciences to chaos, and all the sciences are agreed in rejecting it. On the other side, we may perhaps suggest that science has not shown how change can come about except by a sort of normalized miracle. It would not be true to say that belief in miracle reduces the *world* to chaos, though it would throw the natural sciences into confusion. On the contrary, miracle postulates that nature is thoroughly explicable. Laws must exist and be known before we can declare that they have been broken. But the prestige of natural law, or rather of uniformity of sequence, is a comparatively recent thing; in the pre-scientific ages it was much easier to believe that the laws of nature had been suspended and such alleged breaches were accepted as fairly common occurrences.

We must, however, admit that the miraculous is welcome to some minds because they dislike law and order. They would prefer to live in a world where statues may conceivably wink, houses fly, and cripples suddenly walk. Such a world might be more exciting than the world as known to science, but I think it is a mistake to suppose that it would be brought more easily under the religious point of view. An irregular world would not really be more "dependent." On the contrary, I suggest that only a cosmos which seems to be sufficient to itself can be conceived of as having been created by God. As Professor E. C. Moore has rightly said: "Nature is super-natural to the core, and the supernatural is natural to the limit." The poet Schiller has some remarkable verses to this effect:

" The great Creator
We see not—He conceals Himself within
His own eternal laws. The sceptic sees
Their operation, but beholds not Him.
' Wherefore a God ? ' he cries; ' the world itself
Suffices for itself ' ; and Christian prayer
Ne'er praised Him more than does this blasphemy."

Supernaturalism and naturalism reciprocally provoke each other. As long as one exists, the other has a relative justification. Most people are materialists, of a sort, and if they are religious they

naturally want a materialistic religion. It is no part of the program of Liberal Christianity to destroy the belief in miracles. It is enough for it to claim that a standardized orthodoxy, adapted to the supposed mental calibre of the majority, ought not to be imposed upon everybody.

Miracle is one of the burning questions of our day. The question of immortality is another. A great deal has been written on this subject lately, and there is no doubt that the tragic events of the World War have led to some rather unwholesome developments of the desire for survival, and the wish to find some tangible proofs of existence after death.

I can obviously touch only very briefly on this subject; but this one thing I want to say. The problem of human immortality has been far too much isolated from its real context. It is not a subject on which natural science, or psychical research which ought to be a branch of science, can have anything to say. For the question at issue is not the temporal and perhaps temporary survival of disembodied spirits, or the possibility of a physical resurrection, or of the conscious existence of the soul without bodily organs. These are not part of the *religious* conception of immortality, though they may interest that large number of people who desire evidence of survival on other than religious grounds. Inquiries which start from these points lead nowhither.

The belief in immortality is really part of the religious demand for a non-contingent world of absolute and eternal values, of which this world is only an image. Individual survival in time is no necessary dogma of religion; but the belief that "all that is transitory is only a symbol" *is* a part of religion. The proper starting point is the definition of God as the supreme Value, the *valor valorum* and the faith of Plotinus, which he fortifies by his dialectic, that "nothing which truly *is* can ever perish." "All that is, at all, lasts ever, past recall." Whatever has value in God's sight is safe for evermore, though in the world of time and place it has finished its course and disappears. This gives a solid basis for our confidence that whatever part of ourselves deserves to be immortal escapes extinction, and lives in the eternal order. We must admit that this belief, though by no means shadowy, is a bare outline, without the filling-in which our curiosity craves for; but we must acquiesce in an ignorance which is almost certainly entailed upon us by the

limitations of our mental capacities as human beings. It is useless to appeal either to revelation, or to mysticism, or to science, for more details; they are not procurable. But the hope of eternal life rests securely on the reality of the Divine attributes, truth, goodness, and beauty, in which we can participate even here and now.

If Nicholas of Cusa was right in distinguishing between *infinitem* and *interminatum*, if Hegel was right in distinguishing between a good and a bad infinity, religion is concerned only with the good infinity, with the qualitative, not the quantitative eternal. "This is life eternal, that we should know Thee, the one true God, and Jesus Christ whom Thou hast sent."

It may be asked whether durational immortality is not the symbol and Platonic "copy" of eternal life. The question is difficult; but we are hardly justified in claiming on this ground a survival in time for which there is no evidence. Baron von Hügel, whose book on "Eternal Life" is one of the most valuable discussions of the whole subject, borrows from the later Neoplatonists and the schoolmen the conception of *αἰών* or *ævum*, a condition between the perfect eternity of God and merely temporal existence, and from Bergson the notion of *durée* as opposed to clock time; and with the help of these two conceptions draws a picture of what human immortality may be. The thought is interesting, but neither of the two conceptions on which it is built is very securely planted.

The pendulum will continue to swing this way and that. The heresy of to-day will become the orthodoxy of to-morrow. But humanity is not marking time in the pursuit of knowledge. Science progresses, and, we may piously hope, philosophy too. The new collaboration between the two, the new desire for mutual understanding between science and religion, the weakening of the old dogmatisms on both sides, are a most happy feature of our generation. Think of the encounter between Wilberforce and Huxley about men and monkeys, or Gladstone's defence of the Gadarene miracle against Huxley. We seem to have moved centuries since those days; and it is not the Church only which has learned salutary lessons. Theologians and scientists are at least able to meet without the slightest reserve, and with a good hope of being able to work together in the service of the God of Truth.

BOOK I

CHRISTIANITY AND PHILOSOPHY

Philosophy is the science which co-ordinates and evaluates all other sciences. The chemist, the botanist, the philologist, the anthropologist—all these have fields of activity more or less definitely limited, but the function of the philosopher is to view these contributions as a whole in the light of ultimate reality and value. How, we must also ask, do Christian truths appear when considered as a part of the totality of all knowledge ?

- Chapter I. BEGINNINGS OF MODERN PHILOSOPHY
- II. ANTI-RELIGIOUS THOUGHT IN THE
EIGHTEENTH CENTURY
- III. KANT AND THE GREAT IDEALISTS
- IV. TENDENCIES OF CONTEMPORARY
PHILOSOPHY
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SOPHY

CHAPTER I

BEGINNINGS OF MODERN PHILOSOPHY

BY PROFESSOR HARRIS FRANKLIN RALL, PH.D., D.D.

The story of philosophy in the Middle Ages indicates—and the dominant characteristic of medieval thought demonstrates—that philosophy was regarded as “the handmaid of theology.” Despite bold and far-reaching speculation on the part of individuals, the conclusions of philosophers were controlled by the teaching of the Church. At the Reformation this control was swept away, and a new method, the method of induction, was given primary recognition.

MAN lives in a dual world. There is the world of sense, of things, to which he is bound with his body; and there is the world of thought, of inner experience, of meanings, of values. So man began long ago to ask what the world really was and what it meant for him.

Philosophy and religion both deal with questions that are thus raised, but there is a difference in their attitude and approach. The philosopher, it is true, has his practical and personal interest, as does the man of religion, but his approach is that of the inquiring mind that seeks first of all a rational explanation; the emphasis is on the intellectual. Religion begins with a personal and practical experience: on the one hand the feeling of dependence and need, on the other the sense of some higher power upon whom man depends, to whom man may look for help, and in whom is man's highest good. Philosophy, indeed, may arrive at God as the supreme reality; religion begins with God, and not as an explanatory idea but as one known in personal relation. It says not simply, “O God,” but, “Thou art my God.” Yet religion, like philosophy, must go on to ask about the world at large, and must consider the meaning of its own thought of God in relation to that world.

Traditional thought has been wont to draw a sharp line and seek to separate the stream of Christian history from the tides of faith

and thought in the surrounding world. Yet from the first the new religion had its relation with the larger world. Its sacred writings, the New Testament, were written in Greek. Such names as the Word (*logos*) and Lord (*kurios*) and Saviour (*soter*), used to set forth its thought of Christ, were familiar terms in the Græco-Roman world of philosophy and religion. In the second century, the leaders of the Church sought to interpret the new faith to the thinking men of this Roman world. What they found was not merely superstition in religion and paganism in life: they found certain great philosophies, that proffered at once explanations of the world and theories of life. Platonism, Aristotelianism and Stoicism were the most notable of these. These early Christian thinkers recognized the truth in this Grecian thought, used its terms, and were influenced by it in their statements of doctrine.

Greatest in this field was Plato. The kinship of his thought with Christianity was apparent. He saw, as Christianity did, that the world of deepest meaning and value, the real world, was not that of material things; it was the world of ideals, of that which was beautiful and good and true. All the gold of earth, he declared, could not outweigh virtue. For him God was the supreme, the single and unchanging being in whom goodness and truth and beauty had their existence and their source. He believed in immortality and in moral judgment upon each soul as well.

For Aristotle, too, God was the centre of all thought and the source of all being. The world, he declared, was full of change and becoming; somewhere there must be a pure energy which is the source of all this and is itself unchanging. Such an energy must be spiritual, pure thought. So God is the All-Mover, in whom is the perfect ideal and order of the universe and all things in it. Yet we must not think of a God who works with and in His world. God's thought is turned in upon Himself, upon His own perfection. It is not God that loves the world but the world that loves God, and the power with which the world is thus drawn to God is the source of all desire and explanation of all action. Of a personal God and a religion of fellowship, there is of course no thought here.

Stoicism had no such influence upon Christian theology as did Plato and Aristotle, yet we find in it significant points of contact. For Stoicism God is not a being removed from the world; rather, all its life is in Him. On the one hand He is finest, subtlest matter;





By HARRY BATES

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SOCRATES TEACHING.

on the other He is reason, order, purpose, spirit, providence. Despite its aspect of materialism and pantheism, Stoicism brought the Divine nearer to men. In its ethics, especially as found in the later Stoicism of Seneca, Epictetus, and Marcus Aurelius, we have its closest kinship with Christianity. It stressed the life of reason that was to master all passion and impulse, that was to find its sure good within itself and to be wholly independent over against the world of things and change and evil men. The later Stoicism showed a deeper sense of the Divine providence and help, and a stronger conviction of the solidarity of human life and of what man owed to man. Here one finds words that are so surprisingly like those of Paul that some declared Seneca was a pupil of Paul and others that Paul had learned from Seneca.

A just picture of these philosophies, however, will show another side. The Church had something to learn from these masters of thought as it set about its task of interpreting its faith to the thought of men; but Christianity had something to assert that was not found in them and that was fundamental for its whole conception. The chief concern of the Greek thinker was philosophy. True, philosophy was his religion; it gave him the truths, the ideals, by which he was to live. But the theory came first, the emphasis was intellectualistic. Christianity followed the Hebrew ideal; it began, not with a system of ideas but with the knowledge of the living God who had come to men, and with fellowship with this God. Religion comes first here, not philosophy. The dialogues of Plato give us lofty speculation and argument, the Old Testament shows us men who were filled with the sense of God's presence. The difference becomes clearer when we turn to the idea of God. For the Greek, God is thought of in terms of being, the ultimate reality, whether he be the "idea" of Plato, the "prime mover" of Aristotle, or the pervasive essence and reason of the Stoics. For the Christian, God is Person. True, the word person came late, the idea however was present from the first as it was in the Old Testament. God is a being like ourselves, knowing, feeling, with moral character and purpose, carrying out His ends—in the fine Old Testament phrase, a living God. That is why religion for the Greek mind is first of all a matter of ideas, a philosophy, for the Christian first of all a matter of life.

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With Plato, as with Aristotle, God is not a being with whom man may have personal fellowship. And one other contrast: for Greek thought illumination is the central idea, for Christian thought redemption. For the Greek thought the Divine is the perfect truth and order which men are to see and according to which men are to live; for the Christian thought the Divine is a redeeming Presence, a Love that comes down into human life, seeking man and giving itself to man as the transforming power of a new life. And because the Greek conception is intellectualistic, it remains aristocratic. The Platonic seer and the Stoic wise man are both of the select company who can think and discern, and whose thought can then whip into line the lower impulses and passions of life. Christianity, as Paul insisted, as Nietzsche so clearly saw in his protests against "slave morality" and the "transvaluation of all values," is the religion that speaks to every man and that has something to offer to the lowest. It is a reflection of this contrast when we consider that while democracy is the issue of the Christian conception, Plato and Aristotle were content with a social ideal which left the mass of the people servants or slaves, whose work made possible the higher life of the few.

The significance of Greek philosophy for Christian thought can only be suggested. Its great leaders had helped men to think of the world as an ordered whole that was full of meaning, and to think of it in terms of a ruling Spirit or Being in whom this meaning was to be found. Aristotle had offered the first argument for the being of God. The terms of Greek thought were naturally used by Christian thinkers when they tried to interpret Christianity to the culture of that ancient world or express its meaning for themselves. But it brought also a tendency to think of Christianity as a philosophy or a system of doctrine rather than as a revelation of God and a way of life. Under this influence men sought to define God in such terms as essence and substance and subsistence rather than to conceive Him in that personal way which is indicated by the Old and New Testaments. And in these discussions, the moral character of God as revealed in Jesus, the supreme concern of the Christian faith, did not receive its deserved emphasis.

In St. Augustine (A.D. 354-430) East and West meet. Here God is thought of, indeed, as ultimate being, pure being; but He is at the same time that holy and loving Person in moral-spiritual fellow-

ship with whom man's life is to be found. Here the supreme religious interest of Hebrew-Christian thought returns; philosophy is not enough, there must be personal fellowship, a fellowship with God through grace and redemption coming from God. Yet the influence of the Greek thought remains also; God is still the absolute—absolute being but also absolute power. This latter aspect of God as first of all absolute will, or power, is the one that Calvin later fixed upon in his emphasis upon God as sovereign ruler.

The later Middle Ages showed a notable intellectual activity. The great name in philosophy was Aristotle. Opposed at first, he became almost as great an authority in the world of philosophy as was the doctrine of the Church in the world of Christian dogma. Yet it was an Aristotle known through but part of his writings, but partly understood, and accommodated to the position of the Church. The influence of Plato was much greater than men realized at the time because it was largely indirect. Aristotle himself was unconsciously interpreted in a Platonic sense. It is a great mistake to think of this period as an age of intellectual stagnation, or one in which reason was pushed to one side. It was a time of keen minds, of vigorous thought. So far from excluding reason, men set as their great task the establishment of a single system of thought in which philosophy and theology should be one. Nor had human thought ever concerned itself so appreciatively or vigorously with the great realm of inner realities. It is enough to recall that Dante's great work, the "Divine Comedy," rested avowedly upon Thomas Aquinas, who summed up the genius of the Middle Ages.

III

As we look back upon this remarkable period we perceive clearly enough that it had its defects. Its conception of Christianity was intellectualistic. It followed the Greek tradition rather than the early Hebrew-Christian; Christianity was for it a sum of truth rather than a way of life. It gave supreme place to authority, an external authority lodged in the Bible, the Church and the creeds. True, there was a sphere of natural religion which men might attain by reason, and reason was used to defend dogma, but the supreme truths were those comprised in a supernatural communication of information and their authority was absolute. Faith was not that fundamental attitude of trustful obedience which Jesus

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called for and Paul stressed; it was rather the acceptance of the doctrines which were thus authoritatively given. Scholasticism dealt too much with the formal and abstract. Rightly it concerned itself with the world of the unseen, of moral and spiritual realities; but in the main its leaders were committed to a philosophy which found the highest reality in general ideas, and to a method which was convinced that truth could be discerned and established by formal logic. The living world of concrete realities as seen in history and human experience and nature had much less significance than for us to-day. Finally, with its underlying dualism of super-nature and nature, this period could not do full justice to those everyday interests of men which appeared in the new world of natural science, industry, and the developing social life, especially as seen in the growing nationalism.

It is never possible to separate one era of thought sharply from another, or to define the thinking of any period in so simple a fashion as above, without disregarding important elements. Within a general agreement, medievalism included significant differences, and the beginnings of modern thought reach far back into those centuries. Philosophy, summoned to defend tradition, went on to its own conclusions. Arts and inventions progressed and drove men to a fresh and independent study of the forces and laws of nature. Men awakened to the appreciation of the concrete and could not be limited to abstractions. And the new tides of life, social, industrial, national, called men to new reflection.

The difference between the old and the new can be brought out by certain contrasts, remembering always that you can never draw a sharp line or make your opposition absolute. The old world represented tradition and authority, the new thought demanded fresh investigation. The old thought found its world in general ideas, the new was interested in concrete reality. The old method was deductive; it started with accepted principles and argued from them. The new method was inductive; it demanded that men should observe, should study this world of the concrete real, should examine anew things as they are and then draw conclusions. The older thought held to a static world, fixed and unchanging, a world with a higher reality of ideas, and a lower reality of individuals and things, a world of fixed institutions, Church and State and social rank. The newer thought was of a dynamic world. Reality was no

longer a matter of eternal ideas and inert matter; energy and action were the measure of reality. And the world was a growing, developing world. The idea of development was not new; it belonged to Greek philosophy, and Augustine knew it, as did Aquinas. But development for these was simply the unfolding of what was already within, the realizing of a potency already present. Now there came the thought of development that involved real change, the appearance or achievement of what was new rather than a mere unfolding of something already present.

IV

The lines of change, along which proceeded the modern awakening, were at least four in number. There was awakening in the realm of practical life, social, political, economic, and in practical invention. There was the rediscovery of a wonderful past culture in the Renaissance. There was the religious awakening of the Reformation, with its fresh sense of religious values and experience and of the rights of the individual. Finally there was the scientific movement and the movement in philosophy. Only the last of these falls strictly to our account in this chapter, but we must include under philosophy some general comment on the new science.

The significant fact about the new age of science was not simply the new interest with which men turned from disputes about general ideas to this concrete world of nature. Nor was it the notable advance in actual knowledge joined in our minds to names like Copernicus, Galileo, Kepler and Newton. It was rather the fact of a new method and a new point of view. Francis Bacon (1561-1626) has usually been hailed as the great prophet of this modern view-point, but there were others beside him and even before him. Great men like those just mentioned were in their measure philosophers as well as scientists; they were clearly conscious that they were following new methods in making their discoveries. Bacon himself, however, less notable for what he achieved in science, stood out as the man who set himself especially to make clear the need of the new method in human study and what this involved. Bacon opposed the old method of fruitless argumentation that began with general ideas and deduced conclusions, a method of dispute that assumed the possession of knowledge and

was more anxious to confound others than to advance. He demanded observation first of all.

Darwin refers to this point when he declares of himself: "I worked on true Baconian principles, and, without any theory, collected facts on a wholesale scale." But collection of facts is not enough. The facts must be studied, weighed, compared. Agreement and difference must be noted so that one may find the essential nature, the cause that runs through it all. Deduction, too, is necessary; one must make hypotheses on the basis of these facts and test these in turn by experimentation and observation. To one other great element in modern scientific method Bacon gave sound recognition, though he did not appreciate its full importance, namely, exact quantitative measurement. Bacon was above all modern in this, that he saw in the study of the natural world the source of the power by which man might control nature to his own ends. "Knowledge is power," is his best known saying.

Of many names that appear at the beginnings of modern philosophy, four stand out as prominent in their own right and of special interest to those who ask as to the relation of modern philosophy to religious faith: the French thinkers, Descartes and Pascal, the German Leibnitz, and Spinoza, the Jew. Widely as their systems differed they all showed the mark of the new age. They shared the modern scientific spirit, with its especial appreciation of exact mathematical methods. All except Spinoza made notable contributions to mathematical and physical science. All of them recognized that the world of nature was to be explained according to uniform rules of mechanical operation. Yet all four were men of definitely religious conviction, and Descartes, Pascal and Leibnitz were all concerned with showing the congruity of the new with the old faith. They realized that with this casually connected, quantitatively measurable physical world which the new science was revealing, there was a world of ultimate values, of the idea, of the spirit.

René Descartes (1596-1650) marks himself as a modern first of all by his protest against tradition and by facing the problem of how man can know. "There is no question," he declares, "more important to solve than that of knowing what human knowledge is

and how far it extends." After testing and discarding all else, he comes to one fact which he cannot doubt, and that is the very fact of doubting, of thinking, of consciousness. "I think (or, I am conscious), therefore I am." His final conclusion is that, "there is nothing that gives me assurances of its truth except the clear and distinct perception of what I affirm." The intellect, then, is the sole means of knowledge: man's reason can be trusted, and the final test is that of clear and distinct ideas.

But of these clear and distinct ideas, there is one to which all other ideas go back, that is the idea of the one perfect being, God. This would not be the perfect idea if it did not involve the element of reality, of actual existence. So Descartes argues, as the scholastics did, from the idea to the existence of God. He goes further, however, than they. He uses the principle of cause: unless God really existed, this infinite, perfect being, the idea could not arise in our finite minds. Further, without this God who is the truth and the source of all truth, man could never be sure of the truth of his ideas and of his knowledge of the world. Here was Descartes' real concern, not with the God of religious faith and life, but with God as an explanatory first principle of the universe.

From this thinking mind of man and from the idea of God as the source of all order and the assurance of truth, Descartes passes on to the material world. Here he applies again his test of clear and distinct ideas and concludes that matter is simply extension with the further marks of divisibility and motion. Curiously enough he does not see that it is one thing to say that matter is extended, another to declare that extension is all there is to matter. But Descartes was misled by his rationalism, with its supreme confidence in the intellect on the one hand, and with its unwillingness to recognize anything that could not be grasped in his clear and distinct ideas.

The real interest of Descartes lay in this world of extension, which he could submit to mathematical measurements and bring under mechanical laws. Having posited God as a necessary source of the ordered world and condition of knowledge, he left Him to one side, as he did also that human consciousness with which he started. He represents the radical method of mechanistic interpretation which is held by some to-day to be the last word of science. He considered animals to be mere automata, machines without consciousness or

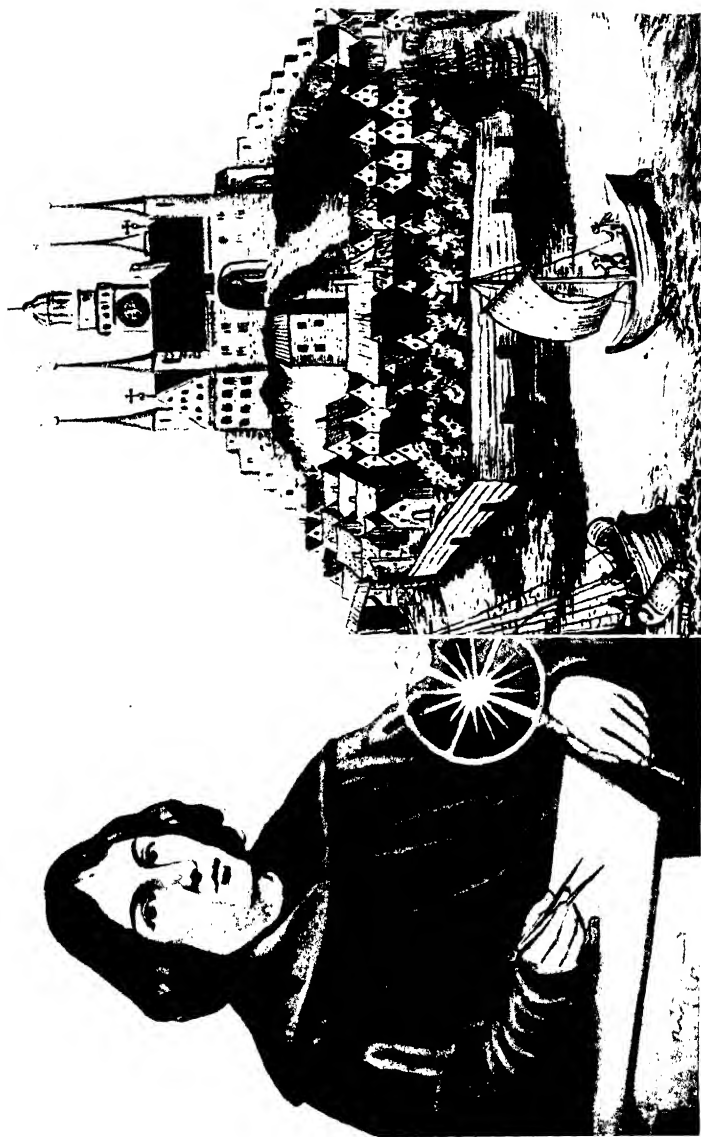
feeling; and even into human life he sought to extend the same principle. At one time he was busy dissecting heads that he might discover the physical processes which would explain memory and imagination. In the end he leaves an irreconcilable dualism, with no explanation as to how the world of thought and the world of extension are related to each other.

VI

Blaise Pascal (1623-1662) achieved distinction by original contributions in physics and mathematics. He, too, was a child of the new day, studying the natural world from the mechanistic standpoint. But Pascal brought a depth of religious interest and of religious experience which neither Descartes nor Leibnitz possessed. The new learning was concerned with the material universe. Astronomy had shown its incalculable extent in comparison with which the earth and man seemed to shrink to utter insignificance. And all this world order the new science sought to bring under laws of mere mechanical action. What now was man, who with his earth was but a little while ago the centre of the universe? And in this world of mere mechanical happening, where was the moral and spiritual which hitherto had seemed to men supreme? How could the reality of the spiritual be asserted and known?

First of all Pascal declares the superiority of man to nature, of the personal and spiritual to the merely physical. He knows the measure of quantity as applied to the physical; but he knows also another measure, that of value. Descartes had begun with thought as man's first clear certainty, but he had passed quickly to the world of things and then had sought to bring man himself and man's psychical life under the rules of this material order. Pascal is interested in this first world. In thought is man's greatness; by thought man rises above the universe. Mere space, mere extent does not count. "By space the Universe encompasses and swallows me as an atom, by thought I encompass it. Man is but a reed, weakest in Nature, but a reed which thinks. . . . Were the Universe to crush him, man would still be more noble than that which has slain him, because he knows that he dies and that the Universe has the better of him. The Universe knows nothing of this."

How then shall man know this spiritual world, this world of higher



COPERNICUS AND FRAUENBURGH CATHEDRAL, OF WHICH COPERNICUS WAS MADE A CANON SO THAT HE MIGHT HAVE TIME AND MONEY TO PURSUE HIS INVESTIGATIONS IN ASTRONOMY.

with his thought till he secures a world that is a unity. The unity of the world he finds in an ultimate Being, the infinite, the eternal, in whom alone there is real existence. Whatever exists in Him, and nothing can be conceived apart from Him. God consists of infinite attributes of which we know but two, thought and extension. Apparently, though, according to Spinoza, the reality of God is other than our conception of these attributes, and we must not think of God at all on the analogy of our human nature. With God there is no time or change, no plan or purpose, no love or hate; only the perfect and eternal reality is in Him.

What then is the relation of man and the world to God? God is not apart from His world, nor does He act upon it from without. God is in His world; better stated, the world has its being in God and only in Him. There is no reality except God. There is no chance in the world, no freedom, nothing contingent; all is the eternal determination of God. And here it would seem, if the thought were logically applied, that individual existence, including man, would be wholly swallowed up in the Divine.

One conclusion is clear: there can be no religion here in the sense of a personal fellowship with God. We cannot speak of a love of God for man, for God neither loves nor hates nor desires. We cannot think of any redeeming purpose that God is carrying out in His world, for God is the infinite perfection ever existent. But man is to find a redemption, and he is to love God and through this love is to find the way of life. This love is not a matter of feeling; it is an intellectual love (*amor intellectualis*). This love is the vision of God, the contemplation of God, which is man's highest good. It is the love with which God loves Himself, contemplating His own perfect being, and thus our love is a part of the infinite love. It is part of man's knowledge of God that he shall see all that is finite and particular in the light of the eternal and so, and only so, know its real nature as well as know God Himself.

Philosophy, says William James, is simply the eternally recurrent problem of the One and the Many. Spinoza stands with those who emphasize the One. So great is for him the sense of the one infinite Being and His sole reality, that the many are lost almost altogether. There is no reality apart from God, nor any action. Moral freedom passes out; all the conduct of man is absolutely determined. Individual immortality has no place. It is hard to find any real meaning

for history, for there is no purpose or future achievement with God, and there is no freedom, no contingency, by which the finite may move on through conflict from more to more. Religion is intellectualistic; it is an idea, a vision, but not a personal communion, for God may not be thought of at all as personal.

And yet there is real religion here, more perhaps than with men like Descartes and Leibnitz who emphasized their conformity to the faith. Novalis called Spinoza a "God-intoxicated man." God was no mere theory for him. He was the eternal and perfect Being in contemplation of whom Spinoza found peace and strength and even joy for his own hard and troubled life, a life which he lived in serenity and kindliness of spirit. The words could truly be used of him, that "he endured as seeing Him who is invisible." No man is religious until he has found that which is for him holy, that is, absolute in its meaning and absolutely to be revered. This Spinoza had found and it became for him not simply a theory, but a way of life.

VIII

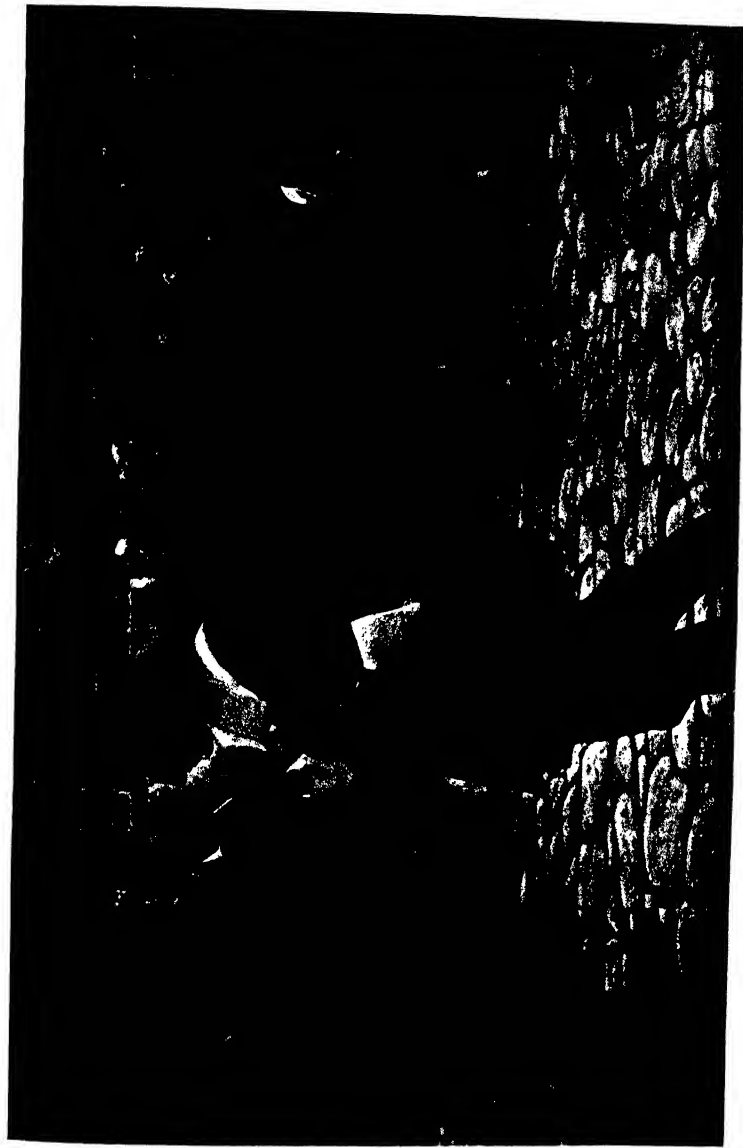
With Gottfried Wilhelm Leibnitz (1646-1716) we come to the last of the notable figures in the opening period of modern philosophy. He stands unrivalled in a great age in the many-sided character of his genius. Natural science, mathematics, politics, jurisprudence, economics, religion, philosophy, all receive his attention, and he contributed to all that he took up. It is enough to cite here his discovery of differential and integral calculus and his introduction into psychology of the idea of the subconscious. He shared the position of the newer thought that all occurrence in the physical world is to be explained as mechanistic, including that of organic life and even of the human body. He was at the same time a man of genuine religious faith, and no man of his day gave himself more constantly than he to the task of uniting in one system the mechanical and the teleological conceptions of the world.

Leibnitz began with the idea of substance, that is, the real nature of being. Descartes had left the two worlds of spirit and matter side by side, and had defined matter as extension. Leibnitz declared that space was not a thing in itself but simply stood for the arrangement of things in relation to each other and the way in which things appeared to us. The world about us is to be explained not in terms

of extension and motion but in terms of energy. "Every substance works, and everything which works is to be called a substance." "That which does not work does not exist." If material substance were mere extension then you could go on dividing it *ad infinitum*, never reaching final reality, for you cannot have real being without unity; "being and unity are the same." The idea of atoms is right, only atoms are not indivisible particles of "matter," but centres of energy. Descartes had said that the amount of motion remained ever the same in the world; Leibnitz declared that it was the quantum of energy that remained the same. Thus Leibnitz asserts two of the great ideas with which modern thought works, the dynamic conception of the universe and the idea of the conservation of energy. These centres of energy which make up all of existence Leibnitz called monads, emphasizing by this term the fact of unity which he considered as essential as that of energy.

But Leibnitz does not think of this monad as simply physical energy, it had a psychic side as well. And here there comes into play a principle of which Leibnitz made great use, that of continuity. For him there were no gaps in nature, but everything was related by infinite gradations. He applied the same principle when he tried to reconcile the Lutheran and Reformed Churches, as well as Protestant and Roman Catholic. He knew no absolute oppositions. So he seeks here to overcome the dualism of Descartes. There is no absolute difference between what we think of as matter and what we know as mind. The energy which makes up the lowest forms of being has in it a certain blind effort or striving which is like the will in that higher monad, the soul of man. Further, if you begin at the other end, with man, you will find in him all grades of consciousness reaching from clear thought down to the subconscious. We may assume then an infinite number of grades of consciousness reaching without break from the highest thought of man, through the lower animal life, down to what men call inert matter. The monad is always soul as well as energy, though its psychic life on these lower stages is quite unconscious.

But there is one other important point as to the monad; each monad is different from every other monad in the world, each is a distinct individual. This principle of individuation is most important with Leibnitz. It is in sharp contrast with Spinoza. In the great problem of the One and the Many, Spinoza so emphasized



THE YOUNG SPINOZA REVILED IN THE STREETS OF AMSTERDAM.

By SAMUEL HIRSZENBERG.



GOTTFRIED WILHELM LEIBNITZ.



FRANÇOIS MARIE AROUET DE VOLTAIRE.

the One that it seemed to swallow up all liberty and individual reality of the Many; they had no reality except that of the infinite in them, and there was no possible action except as determined by that infinite. Leibnitz's position is equally opposed to the hasty conclusions which some men have drawn from natural science, supposing that there is no reality in the world but that single physical energy which moves in all things, and that differences of the individual as well as differences of quality are incidental and without significance. Each monad, says Leibnitz, has its own distinct nature, and that nature is the law by which it acts, its inherent principle of behaviour.

How, then, do we secure unity and harmony in the world? Why is the world a system instead of an anarchy with innumerable independent units? Here comes in Leibnitz's idea of the pre-established harmony. In actual fact each monad, viewed by itself, is an independent world. It does not act upon others, it is not acted upon; it does not see the world, as we think, and "it has no windows by which the world can come in." All its action and suffering, all its perception is simply according to the law of its own nature as established at the beginning. Yet all these monads form a unitary system because God has created them all, and each one for all the others. According to this purpose of God each reflects in its life the whole universe, but differs from all the rest by reflecting it from its own angle, and all fit together not by actual interaction but in the harmony of this original vision and purpose of God. For Leibnitz the idea of God is thus absolutely necessary to make possible knowledge and to explain interaction.

From this standpoint Leibnitz answers the question of the relation of cause and purpose. Modern science is right, he declares; the universe must be explained mechanistically and according to uniform and necessary laws. But the laws themselves, the system as a whole, the nature of the individual monads, this is determined by God and fulfils His purposes of wisdom and goodness. The universe is through and through causally explained, but it is purposeful throughout as well.

It is clear, too, how Leibnitz rules out the position of materialism. The idea of inert matter or mere extension cannot explain the world; for this the conception of energy is necessary. But energy in the end must be psychic in its nature, and that according to the

principle of continuity. Here Leibnitz stands in interesting contrast to some modern naturalistic thinkers. These also have used the principle of continuity, but for the purpose of levelling down, sometimes calling to their aid the theory of evolution, sometimes the idea of the conservation of energy and correlation of forces. Since man has come by continuous development from the lower forms of life, they argue, must we not say that there is nothing in man which was not there in those lowest forms? Indeed, since the organic has come from the inorganic, must not all life be explained as mere mechanism? And this is enforced for them by the idea that there is but one (physical) energy in the universe which remains unchanged in amount and simply appears in different forms. Leibnitz uses the same principle of continuity but he levels up instead of down, insisting that the psychical extends down into the lowest forms of being without a break. And he is supported here by his principle of sufficient reason, of which he made equal use with that of continuity. The universe, he feels, cannot be explained without this psychic side in all being and without an ultimate source in God.

In his discussion of the problem of evil Leibnitz is not at his best. Pierre Bayle had suggested that the world was best explained if we assumed two principles, one of good and one of evil. Leibnitz rightly asserts that we must look upon the world as a whole and not simply at individual items. The choice that God made, he declares, was between possible systems. As a wise and good God He chose the best of these. But some evil is inevitable as belonging to that which is finite, and some is willed by God as punishment for man's wrongdoing or as a means to a higher good. How moral evil is to be explained is not so clear, for though Leibnitz considers himself a defender of freedom as against determinism, yet it is hard to see where freedom can come in with monads whose nature is determined from the first by a principle which governs all their action. Nor was there room in Leibnitz's thought for that other fruitful modern idea which sees, alike in the individual human life and in the life of the world as a whole, not the perfection of some static system existing from the beginning, but a goal of high achievement possible only through long ages of conflict and struggle, where there is of necessity a certain element of freedom and contingency and so a measure of inevitable suffering and failure and evil.

IX

What has been the bearing of philosophy upon the movement of Christian thought and the interests of the Christian faith?

Christianity is no mere emotion, nor is it simply a matter of forms of worship and organization; it is a faith that carries with it a definite conviction as to God and the world and man. The task of the Christian thinker is to express that faith for his day. In doing so he is inevitably influenced by the terms and the ideas of the thought of his own time. So the earlier Christian theology was inevitably affected by the earlier forms of philosophy, especially of the Greeks. Yet deeper than all this was the actual life of faith and Christian experience seen in the Greek Fathers, who were the first great Christian thinkers, and notably in St. Augustine, one of the greatest spirits of all the ages.

The rise of the modern age was marked by a new method of investigation, or study, and by a new world view, especially as regards the world of nature. Both of these are seen in the thinkers whom we have considered. The method was that of original investigation rather than the acceptance of authority or the reliance upon speculation or abstract logic. The world was seen in terms of energy and growth rather than of fixed and changeless forms. The universe expanded and the earth lost its central place. Above all, men began to think of nature more and more in terms of universal and unchanging natural law.

It was easy for men under these conditions to emphasize the material as against the spiritual, to see everywhere iron necessity instead of freedom, to think of the universe as a great machine and find no place for a living God. Yet in the main these first thinkers of the modern era did not take such a position. They were genuinely religious men who believed in a spiritual power at the heart of the universe and in a higher purpose that was being carried out. And most of them avowed the distinct Christian standpoint.

At two points they rendered definite service to the Christian faith. First, they compelled the Church to reflect more deeply upon those realities of its life and faith which constitute its abiding truth and power, realities unaffected by changed scientific theories. Second, they helped Christian thought to move on to a truer conception of the meaning of the world of nature and history and of God's relation to it. We have come to value history more highly as

an ongoing life in which God, the creative Spirit, is still working out His great purposes. The world understood in terms of energy has brought nearer to us the God who is indwelling Spirit as well as transcendent Being. We are coming to feel that a nature that shows universal law is as much the instrument of this infinite Spirit of goodwill, indeed, that only through such an ordered universe could the purposes of such a God be carried out. The supernatural becomes the end and the inner meaning of all that is natural.

At the same time these thinkers illustrate the distinction between philosophy and religion and show how little philosophy can take the place of religion or do its work. For religion is a matter of life, the life that a man lives in the light of the Eternal and through the strength that is thus derived. It has its own insight and experience of reality, its own satisfactions and sources of strength. Christianity is no mere set of ideas taken over from the past and modified perforce by science or philosophy. It is the ongoing life of a great fellowship, bound together by a common faith in the God who is revealed in Jesus Christ and filled with a common spirit which is to them like the gift of God and the great task of men. To assert the meaning of this faith for all thought, to transform all life in the light of this vision and by the power of this experience, that is the task that lies beyond the theories of philosophy and that waits upon the Church of every generation.

CHAPTER II

ANTI-RELIGIOUS THOUGHT IN THE EIGHTEENTH CENTURY

By G. K. CHESTERTON

The conflict between Islam and Christendom, and the war between the Reformation and the counter-Reformation contributed to the sceptical expansion of the eighteenth century. They made many people think that as both the Crescent and the Cross could not be true they might both be false, and the reign of the rationalist began.

THE eclipse of Christian theology during the rationalist advance of the eighteenth century is one of the most interesting of historical episodes. In order to see it clearly, we must first realize that it was an episode and that it is now historical. It may be stating it too strongly to say that it is now dead; it is perhaps enough to say that it is now distant and yet distinct; that it is divided from our own time as much as any period of the past. Neither reason nor faith will ever die; for man would die if deprived of either. The wildest mystic uses his reason at some stage; if it be only by reasoning against reason. The most incisive sceptic has dogmas of his own; though when he is a very incisive sceptic, he has often forgotten what they are. Faith and reason are in this sense co-eternal; but as the words are popularly used, as loose labels for particular periods, the one is now almost as remote as the other. What was called the Age of Reason has vanished as completely as what are called the Ages of Faith.

It is essential to see this fact first; because if we do not see its limitations we do not see its outline. It has nothing to do with which period we prefer, or even which we think right. A rationalist is quite entitled to look back to the eighteenth century as a golden age of good sense, as the medievalist looks back to the thirteenth century as a golden age of good faith. But he must look back; and look back across an abyss. We may like or dislike the atmosphere

of the modern world, with its intense interest in anything that is called psychological; and in much that is called psychical. We may think that speculation has gone more deep or that it has grown more morbid. We may like or dislike the new religions of faith-healing or spirit-rapping; or a hundred other manifestations of the same mood, in fields quite remote from the supernatural or even the spiritual. We may like or dislike, for instance, that vast modern belief in "the power of suggestion" expressed in advertising or publicity and educational methods of all sorts. We may like or dislike the appeal to the non-rational element; the perpetual talk about the Sub-conscious Mind or the Race Memory or the Herd Instinct. We may deplore or we may admire all these new developments. But we must fix it in our minds as a historical fact that to any one of the great "Infidels" or Freethinkers of the eighteenth century, this whole modern world of ours would seem a mere mad-house. He might almost be driven, in pursuit of the reasonable, to take refuge in a monastery.

We are dealing therefore with an episode and even an interlude; though the man who likes it has as much right to say that it was an hour of happy daylight between the storms as a Christian has to say it of primitive Christianity or medieval Christendom. From about the time that Dryden died a Catholic to about the time that Newman began to write a little less like a Protestant, there was a period during which the spirit of philosophy filling men's minds was not positively Protestant any more than it was positively Catholic. It was rationalist even in Protestants and Catholics; in a Catholic like Pope or a Protestant like Paley. But it can be seen at its clearest when the last clinging traditions or pretences were dropped; when the most stolid specimen of the Protestant middle classes is found busily scribbling sneers in the foot-notes and even the index of a great history of the Fall of Rome; when a brilliant pupil going forth out of the Jesuit seminary turns back over his shoulder the terrible face of Voltaire.

In order to exhibit the essential quality, let us first compare the period with that which preceded it. Touching its historical causes, no man with a sense of human complexity will offer anything but contributory causes. But I think there are contributory causes that have been strangely overlooked. On the face of it, it refers back to the Renaissance, which refers back to the old pagan world. On the

face of it, it also refers back to the Reformation; though chiefly in its negative aspect as a schism or breach in the old Christian world. But both these things are connected with a third, that has not, I think, been adequately realized. And that is a feeling which can only be called futility. It arose out of the disproportion between the dangers and agonies of the religious wars and the really unreasonable compromise in which they ended; *cujus regio ejus religio*: which may be translated "Let every State establish its State Church;" but which did mean in the Renaissance epoch "Let the Prince do what he likes."

The seventeenth century ended with a note of interrogation. Pope, the poet of reason, whom some thought too reasonable to be poetical, was once compared to a question mark, because he was a crooked little thing that asked questions. The seventeenth century was not little, but it was in some ways crooked, in the sense of crabbed. But anyhow it began with the ferocious controversies of the Puritans and it ended with a question. It was an open question, but it was also an open wound. It was not only that the end of the seventeenth century was of all epochs the most inconclusive. It was also, it must also be remembered, inconclusive upon a point which people had always hoped to see concluded. To use the literal sense of the word "conclude," they expected the wound to close. We naturally tend to miss this point to-day. We have had nearly four hundred years of divided Christianity and have grown used to it; and it is the Reunion of Christendom that we think of as the extraordinary event. But they still thought the Disunion of Christendom an extraordinary event. Neither side had ever really expected it to remain in a state of disunion. All their traditions for a thousand years were of some sort of union coming out of controversy, ever since a united religion had spread all over a united Roman Empire. From a Protestant standpoint, the natural thing was for Protestantism to conquer Europe as Christianity had conquered Europe. In that case the success of the counter-Reformation would be only the last leap of a dying flame like the last stand of Julian the Apostate. From a Catholic standpoint the natural thing was for Catholicism to reconquer Europe, as it had more than once reconquered Europe; in that case the Protestant would be like the Albigensians a passing element ultimately reabsorbed. But neither of these natural things happened. Prussia and the other Protestant principalities fought

against Austria as the heir of the Holy Roman Empire in the Thirty Years War. They fought each other with a hitherto inconceivable ferocity and cruelty and militaristic concentration and oppression; but they fought each other to a standstill. It was utterly and obviously hopeless to make Austria Protestant or Prussia Roman Catholic. And from the moment when that fact was realized the nature of the whole world was changed. The rock had been cloven and would not close up again; and in the crack or chasm a new sort of strange and prickly weed began to grow. The open wound festered.

We have all heard it said that the Renaissance was produced or precipitated by the Fall of Constantinople. It is true in a sense perhaps more subtle than is meant. It was not merely that it let loose the scholars from the Byzantine court. It was also that it let loose the sceptical thoughts of the scholars, and of a good many other people when they saw this last turn of the tide in the interminable strife between Christ and Mahomet. The war between Islam and Christendom had been inconclusive. The war between the Reformation and the counter-Reformation was inconclusive. And I for one fancy that the former fact had a good deal to do with the full sceptical expansion of the eighteenth century. When men saw the Crescent and the Cross tossed up alternately as a juggler tosses balls, it was difficult for many not to think that one might be about as good or bad as the other. When they saw the Protestant and the Catholic go up and down on the see-saw of the Thirty Years War, many were disposed to suspect that it was six to one and half-a-dozen to the other. This addition involved an immense subtraction; and two religions came to much less than one. Many began to think that, as they could not both be true, they might both be false. When that thought had crossed the mind the reign of the rationalist had begun.

The thought, as an individual thought, had of course begun long before. It is in fact as old as the world; and it is quite obviously as old as the Renaissance. In that sense the father of the modern world is Montaigne; that detached and distinguished intelligence which, as Stevenson said, saw that men would soon find as much to quarrel with in the Bible as they had in the Church. Erasmus and Rabelais and even Cervantes had their part; but in these giants there was still a great gusto of subconscious conviction, still Christian; they mocked

at the lives of men, but not at the life of man. But Montaigne was something more revolutionary than a revolutionist; he was a relativist. He would have told Cervantes that his knight was not far wrong in thinking puppets were men, since men are really puppets. He would have said that windmills were as much giants as anything else; and that giants would be dwarfs if set beside taller giants. This doubt, some would say this poison in its original purity, did begin to work under the surface of society from the time of Montaigne onwards and worked more and more towards the surface as the war of religions grew more and more inconclusive. There went with it a spirit that may truly be called humane. But we must always remember that even its refreshing humanity had a negative as well as a positive side. When people are no longer in the mood to be heroic, after all, it is only human to be humane. Some men were really tolerant; but others were merely tired. When people are tired of the subject, they generally agree to differ.

But against this clear mood, as against a quiet evening sky, there stood up the stark and dreadful outlines of the old dogmatic and militant institutions. Institutions are machines; they go on working under any sky and against any mood. And the clue to the next phase is the revolt against their revolting incongruity. The engines of war, the engines of torture, that had belonged to the violent crises of the old creeds, remained rigid and repellent; all the more mysterious for being old and sometimes even all the more hideous for being idle. Men in that mellow mood of doubt had no way of understanding the fanaticism and the martyrdom of their fathers. They knew nothing of medieval history or of what a united Christendom had once meant to men. They were like children horrified at the sight of a battlefield.

Take the determining example of the Spanish Inquisition. The Spanish Inquisition was Spy Fever. It produced the sort of horrors such fevers produce; to some extent even in modern wars. The Spaniards had reconquered Spain from Islam with a glowing endurance and defiance as great as any virtue ever shown by man; but they had the darker side of such warfare; and were always struggling to deracinate a Jewish plot which they believed to be always selling them to the enemy. Of this dark tale of perverted patriotism the humanitarians knew nothing. All they knew was that the Inquisition was still going on. And suddenly the great Voltaire rose

up and shattered it with a hammer of savage laughter. It may seem strange to compare Voltaire to a child. But it is true that though he was right in hating and destroying it, he never knew what it was that he had destroyed.

There was born in that hour a certain spirit, which the Christian spirit should be large enough to cover and understand. In relation to many things it was healthy, though in relation to some things it was shallow. We may be allowed to associate it with the jolly uncle who does not believe in ghosts. It had an honourable expression in the squires and parsons who put down the persecution of witches. The uncle is not always just to Spiritualists; but he is rather a comfort on a dark night. The squire did not know all there is to know about diabolism; but he did stop many diabolical fears of diabolism. And if we are to understand history, that is humanity, we must sympathize with this breezy interlude in which it seemed natural for humanity to be humane.

The mention of the squire is not irrelevant; there was in that humanity something of unconscious aristocracy. One of the respects in which the rational epoch was immeasurably superior to our own was in the radiant patience with which it would follow a train of thought. But it is only fair to say that in this logic there was something of leisure. And indeed we must not forget how much of the first rational reform of the age came from above. It was a time of despots who were also deists or even, like Frederick the Great, practically atheists. But Frederick was sometimes humanitarian if he was never human. Joseph of Austria, offending his people by renouncing religious persecution, was very like a squire offending the village by repressing witch-burning. But in considering the virtues of the age, we must not forget that it had a very fine ideal of honourable poverty; the Stoic idea of Jefferson and Robespierre. It also believed in hard work; and worked very hard in the details of reform. A man like Bentham toiled with ceaseless tenacity in attacking abuse after abuse. But people hardly realized that his Utilitarianism was creating the new troubles of Capitalism, any more than that Frederick of Prussia was making the problem of modern militarism.

Perhaps the perfect moment of every mortal thing is short, even of mortal things dealing with immortal, as was the best moment of the Early Church or the Middle Ages. Anyhow the best moment of

rationalism was very short. Things always overlap; and Bentham and Jefferson inherited from something that had already passed its prime. Not for long did man remain in that state of really sane and sunny negation. For instance, having covered the period with the great name of Voltaire, I may well be expected to add the name of Rousseau. But even in passing from one name to the other, we feel a fine shade of change which is not mere progression. The rationalist movement is tinged with the romantic movement, which is to lead men back as well as forward. They are asked to believe in the General Will, that is the soul of the people; a mystery. By the time the French Revolution is passed, it is elemental that things are loose that have not been rationalized. Danton has said, "It is treason to the people to take away its dream." Napoleon has been crowned, like Charlemagne, by a Pope. And when the dregs of Diderot's bitterness were reached; when they dragged the Goddess of Reason in triumph through Notre Dame, the mouldering Gothic images could look down on that orgy more serenely than when Voltaire began to write; awaiting their hour. The age was ended when these men thought it was beginning. Their own mystical maenad frenzy was enough to prove it; the goddess of Reason was dead.

One word may be added, to link up the age with many other ages. It will be noted that it is *not* true, as many suppose, that the rational attack on Christianity came from the modern discoveries in material science. It had already come, in a sense it had already come and gone, before those discoveries really began. They were pursued persistently partly through a tradition that already existed. But men were not rationalists because they were scientists. Rather they became scientists because they were rationalists. Here as everywhere the soul of man went first, even when it denied itself.

CHAPTER III

KANT AND THE GREAT IDEALISTS

BY BISHOP FRANCIS J. McCONNELL, PH.D., D.D., LL.D.

The exaggerated deference paid to "reason" in the eighteenth century was bound to produce a reaction, and this reaction was led by Immanuel Kant, admittedly the greatest of modern philosophers. He struck to the heart of the problem by questioning the adequacy of the very tool that had been held in such supreme regard; with his "Critique of Pure Reason" philosophy takes a new start.

IT is not possible to consider the great idealists satisfactorily without reference to their position in the general philosophic movement of their times. This is especially true with Berkeley and with Hegel because neither of them set out to establish philosophic idealism in itself without regard to systematic reasonings current in their times. Each found a question posed for him by his immediate predecessors in Philosophy. To understand the answer of either we must know the question before him.

The first significant idealistic movement in England is that associated with the name of Bishop George Berkeley (1685-1753). To understand Berkeley we must begin with John Locke (1632-1704).

John Locke belonged to the class that William James would have called the "tough-minded." He was the determined foe of all forms of special political privilege in his day, favouring especially the Revolution of 1688. He was not impressed with the divinity which is supposed to hedge kings about, and insisted that no forms of government carry inherent sacredness. All alike must justify themselves by the actual welfare of the people living and working under them.

Locke carried his protests against professedly sacred governmental



DAVID HUME.



JOHN LOCKE.

NAWAB SALAR JUNG BAHADUR.



VADI MARY



IMMANUEL KANT.

systems over to the realm of ideas. He stood against any special privileges being granted to ideas because of any supposed "innateness." Locke manifested impatience against any and all reasoners who would close a debate as to the worth of ideas by simply declaring the ideas in question to be innate. He insisted upon what we might call a democracy of ideas. All ideas alike stand equal as to origin. All alike come out of experience. No idea can lord it over other ideas because of innate superiority of birth.

Locke firmly believed in two types of substance—mind and matter, but minds are not born furnished with innate ideas. Here we come upon the famous *tabula rasa* doctrine. The well-known Chapter IV of Book I of the "Essay Concerning the Human Understanding" tells us that we are to suppose the mind to be at the start as "white paper, void of all characters." Experience furnishes the mind with sensations, which are combined into various "modes, combinations and relations" by Reflection. Sensation and Reflection give us all the ideas we have.

It will be seen that Locke is sturdily trying to keep his feet on the solid basis of common sense. Common sense insists that there are two kinds of reality—mind and matter. While Locke rejects all innateness of ideas he does not reject mind. Mind has the power to order and combine and relate the materials coming as the imprint of sensations.

When, however, Locke conceded as much power to mind as he undoubtedly did, he opened the gate to a pathway which led to regions which he never could have brought himself to enter. He classified ideas into simple and complex,—the simple being those impressed upon the "white paper" (*tabula rasa*) of the passive mind. The passivity of the mind, however, in the reception of these simple ideas is not particularly apparent to a critical reader of Locke—especially when Locke goes on to tell us of the combinations "inexhaustible and truly infinite" which can be made out of the simple impressions. The enormous complexity into which simple ideas can be interwoven raises the question as to whether the simple materials coming to us through the senses have not been transformed into something out of all semblance to the original imprint on the *tabula rasa*. Locke recognizes this difficulty himself in his discussion of primary and secondary qualities—though he writes with a positiveness which indicates that he feels clear himself. Primary qualities

are those like solidity and extension which cannot be separated from the bodies which imprint them on the mind. Such qualities are in the external bodies just as they appear to be. Now bodies have the power not only to report themselves through sensations as solid and extended in the outer world, but they also have the power to produce in our minds knowledge of secondary qualities such as colour, sound, or taste. Locke concedes that colours, or sounds, or tastes do not exist in the outer world just as they appear to us, but maintains that they are effects of causes actually existing outside of us.

Here again Locke is trying to keep close to common sense. If we ask the man in the street how there can be taste without a tongue which tastes, or colour without an eye which sees, or sound without an ear which hears he will reply that something outside of us causes the taste, or the colour, or the sound. There is something in music itself which causes it to be heard as melody, something in honey which makes it taste sweet, something in a sunset which makes it appear red. All else the plain man is likely to ignore as verbal hair-splitting.

We repeat that Locke held firmly to two substances—mind and matter. He believed in the existence of a community of minds and of God. He believed in an external material universe which reports itself to our minds as actually there. Still he does go so far in his admission of a difference between primary and secondary qualities, and he so naïvely uses general ideas, whose presence in the mind he does not adequately account for, that he leaves his system asking one insistent question—namely, what after all is matter? If simple ideas can be combined indefinitely do we not arrive somewhere in the combination at a considerable distance from the simplicity which Sensation gave us at the start? If the mind can do so much toward making-over sensations of taste, colour and sound, that their final appearance is utterly unlike the reality which caused them, where can we put a stop to this virtually creative mental activity? What is the primary quality that alone, or in combination, causes the secondary quality? If the mind itself is just a sheet of white paper who, or what, reads off the imprinted message?

Locke did nothing to unsettle in his immediate successors their belief in mind, but he did start questionings about matter, all unintentionally to himself. His aim was altogether constructive. Probably to this day his doctrine—making allowance for the

advances in psychology and kindred sciences—is that of the majority of those who pride themselves on a common-sense approach to philosophy. There is matter and there is mind, and matter reports itself in mind.

Bishop Berkeley (1685–1753) takes up the question implicit in Locke's system. Locke left two substances—matter and mind. Berkeley made an attack on one of them—on matter, an attack which has never yet been successfully counter-attacked. I have said that William James might have referred to Locke as tough-minded. I am not sure that he would have referred to Berkeley as tender-minded, though it is easier to imagine philosophical idealism as coming from a spirit like Berkeley's than from Locke's. Both Berkeley and Locke were socially-minded. Locke gave much attention to the more solid political reforms. He was not of the temper ever to yield himself to any such propositions as Berkeley's somewhat Utopian schemes for the uplift of society through a university in the Bermudas, nor could he ever have become as interested as did Berkeley in the magic properties of tar-water. Still, it will not do to minimize the severity or closeness of the thinking which produced the Berkeleian idealism.

Berkeley saw at once the weakness of the position of those "who assert that figure, motion, and the rest of the primary or original qualities do exist without the mind in unthinking substances and do at the same time acknowledge that colours, sounds, heat, cold and such like secondary qualities do not." How were the secondary qualities to be separated from the primary? How could extension of a substance outside the mind report itself as extension inside the mind except as an idea, and what existence does an idea possess except in being perceived? In other words, the line between primary and secondary qualities is arbitrary. If colour as we experience it is caused by something which does not have colour as we experience it, extension as it appears to us may be caused by something which is not extended. Strip extension thus from the world outside of us and matter as commonly understood is gone.

There is no matter, then, but there are ideas of matter. These ideas exist only in being perceived. Thus, one of the two substances bequeathed by Locke to subsequent philosophy disappears. What

of mind, or self? Berkeley's reply is that mind is no inert substance known to us merely by its being perceived as an idea. It is an active, perceiving being. It is true that we cannot form an image of it, but we can form a "notion" of a spirit as we form an idea of a material object.

If matter as an inert substance is not needed to explain ideas in our minds, what does explain the ideas? We cannot explain the ideas as coming from ourselves. Our wills are not adequate to such creation. Spirit is the cause of ideas—but not our spirits alone. God is the spiritual cause of the ideas which come into our minds—not any inert material substance. Such substance is unnecessary and impossible.

Berkeleianism as thus outlined has been influential from the date of its publication. The common judgment of the philosophers is that the ordinary objections to the theory are of no great value. Dr. Samuel Johnson's kicking at stones, or striking trees with walking-sticks, is no longer regarded as cogent criticism, but as crass misunderstanding. Such Johnsonian refutation bases itself on the notion that Berkeley conceived of matter as an idea conjured up in our own minds—of such stuff as dreams are made of. Berkeley is not thinking of matter as our own idea merely, but as God's idea.

Put in the Johnson fashion, the above objection is of no considerable consequence. Put in another form, the criticism is worthy of note. Berkeley left ideas with such treatment as to suggest a tendency toward the passivity of the finite mind. We shall see when we come to Kant that a sound idealism can be grounded only in a constitutive activity of mind as agent. It is true that Berkeley speaks of this "perceiving, active being," which "I call mind, spirit, soul, or myself," as exercising "divers operations, as willing, imagining, remembering." He does not, however, rise to Kant's conception of the activity of mind. This appears in his attitude toward abstract ideas. For Berkeley every idea must be concrete. Berkeley did not say so, and probably did not mean so, but his treatment of ideas after all smacks of the Lockian *tabula rasa*. There is an inescapable suggestion of the mind of man as catching an idea and holding it as in a mirror—without itself contributing to the creation of the idea.

I urge this not at all in discredit of Berkeley. Students of philosophy have often remarked upon the thoroughness with which





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Berkeley anticipated the objections of critics of his day, and we cannot hold him responsible for faults discovered later—after Kant had lived and laboured. I call attention to Berkeley's lack of emphasis on the activity of mind more particularly because it left a door open for Hume's scepticism. The ideas in the mind, according to Berkeley, were caused by God—each idea being definite and concrete in itself. To be sure Berkeley himself made use of abstract ideas constantly, but he shrank from acknowledging them. This opened the way to Hume's resolution of the procession of ideas into separate, practically unrelated units with no connexion among them.

Once more the criticism can fairly be urged against Berkeley that he did not provide for an objective order among ideas. By "objective" I do not mean that which exists outside of mind but that which is common to all minds alike. Berkeley is most often criticized for his subjectivity, by which is meant that there is nothing in his theory of the world to forbid the notion that God is presenting one set of ideas of the world to one mind and another set to another mind at the same instant. Of course this would to a degree be necessary on any theory, but if every mind is dealt with by God as a wholly separate unit, there is not adequate provision for an order common-to-all which would make any sort of social existence possible. It is hard to bring ourselves to believe that Berkeley did not think of all this. Surely the problem of the neighbours—the co-existence of minds in a community—did not escape him. Probably the most that can be legitimately urged is that he did not pay enough attention to the need of a system in which minds could meet together.

Berkeleianism, I repeat, has proved a powerful influence in philosophy from the day of its author down to the present. It is one of the outstanding achievements of the reflective intellect. So far as concerns its religious significance it has been a veritable arsenal of weapons against scepticism. Or rather, its method has pointed the way toward the effective dealing with scepticism, namely direct attack on the very foundations of that materialism out of which scepticism comes. Christian thought, in particular, has too often been content with waging a defensive battle. Berkeley's method has taught that a powerful defence for spirit is an outright onslaught on the foundations of matter. This phase of the signi-

ficance of Berkeley is not made less by the fact that the first philosophic consequence of his teaching was to call forth one of the completest expositions of scepticism ever known—that of David Hume.

III

Let us recall that of Locke's two substances—matter and mind—Berkeley sought to get rid of matter. David Hume (1711-1776), taking up the Berkeleian doctrine of ideas, applied that doctrine to the general problems of philosophy so ruthlessly that he cut the foundation from under mind as well as from under matter and came in the end to complete philosophical scepticism. It is necessary in the study of the most important idealistic movements in the history of philosophy definitely to fix the place of Hume. His scepticism shows the shortcomings of Berkeleianism. More important still, the work of Hume woke Kant from "dogmatic slumber" and led Kant to mark out the course for a further advance in idealism.

Hume starts with the Berkeleian doctrine that there is nothing in the mind but ideas. He raises the question as to how ideas can get beyond themselves in any direction. He agrees with Berkeley that ideas cannot report substantial matter, but goes beyond Berkeley in asking how ideas can report a substantial anything. Berkeley had said that we have not an idea but a "notion" of ourselves as existing. Hume insists that the idea of the self must take its place in the procession of other ideas. The ideas are all. If we cannot get beyond them to matter we cannot get beyond them to mind. All readers of Hume will remember the passage in which he treats of the self: "For my part when I enter most intimately into what I call *myself* I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch myself at any time without a perception, and never can observe anything but the perception. When my perceptions are removed for any time, as by sound sleep, so long am I insensible of *myself* and may be truly said not to exist."

With matter gone and the self gone there is not much use in talking about an objective order of any kind. We have seen that one weakness of Berkeley was that he did not expound with sufficient clearness whatever conception he may have had of an order of the common-to-all, beyond speaking of God as the cause of ideas in

the human mind. Hume rules out all objective order whatsoever. There is nothing but the procession of ideas.

Hume saw, however, that he must account for the fact that we think in terms of substance, of cause and effect, of necessity. This he did by saying that when ideas occur together we get to thinking of them as belonging together. There is really no such thing as belonging together beyond this happening together. So with cause and effect: because one idea constantly follows another we get still another idea, namely that one idea causes the idea which follows it. Cause and effect, substance, necessity—all come out of habit, and out of what Hume rather mysteriously called our "propensity to feign."

In the light of philosophic thinking since Kant it is clear what Hume was doing. He was assuming self and the world and certain constitutive conceptions at the very moment he was denying them. In the passage quoted above it is obvious that Hume is taking himself for granted as an abiding agent at the same instant that he is denying himself as such abiding agent. In the brief passage which I quoted he uses the personal pronoun "I" six times and "my" or "myself" five times. It is only by the use of these pronouns that he is able to utter his thought intelligibly at all. If one were to substitute for the personal pronouns "ideas" or "procession of ideas" one could not make sense of the passage. Thomas Hill Green (1836-1882), writing with the full advantage of familiarity with Kant and Hegel, shows with wearisome iteration the extent to which Hume smuggled into his philosophy the identical ideas which he was denying. It must not be forgotten, though, that some conceptions which seem sun-clear after Kant's day were not so obvious before Kant.

Hume has lasting merit. He reduced the sensationalistic philosophy to its legitimate outcome in utter scepticism once and for all. Sometimes the traveller who finds that a path is "no thoroughfare" is practically quite as important as the explorer who finds an open road. Hume's work never need be done again. Thomas Hill Green, mentioned above, once caused some amazement among the admirers of Herbert Spencer by declining to give large attention to criticism of the Spencerian theory of knowledge. Green affirmed that he had already attended to Spencer by dealing with Hume. Only a few confirmed Spencer-partisans would now deny this.

In practical attitudes Hume admitted the futility of his own philosophy. I take from "A Student's History of Philosophy," by Professor Rogers, a condensed quotation from Hume as follows:—"I dine, I play a game of backgammon, I converse, and am merry with my friends; and when after three or four hours' amusement I return to these speculations, they appear so cold, and strained and ridiculous that I cannot find it in my heart to enter into them any farther." In other words, Hume's scepticism was purely philosophical. All religious values split up, vanish into nothingness, along with all other intellectual and moral values. Of course it was open to Hume to say that an idea was of value on its own account just as it might stand. Still, when we reflect that the Humian ideas did not "stand" but flashed by in a procession, the value itself appeared to be fleeting. We repeat, however, that all this in Hume is strictly theoretical. There is even some evidence that he had a measure of faith in theism. Indeed, there are expressions that seem to indicate that Hume anticipated Kant in the emphasis on the primacy of the practical reason. A later time than Hume's, however, had to elaborate this primacy. To Hume belongs the credit of showing that the road was blocked by scepticism in one direction. A sort of philosophic alarm set thought to searching in a different direction. This brings us to Kant.

IV

Immanuel Kant (1724-1804) seems to have begun his philosophical career as a teacher of the accepted Leibnitzian philosophy of his time. A man of genuine ethical interest, he was profoundly disturbed by the moral threat involved in Hume's scepticism and girded himself to the task of setting knowledge on a firm foundation.

It will be remembered that Locke, Berkeley and Hume all allowed ideas to be somewhat of the nature of things-in-themselves, given to us in consciousness—consciousness being a passive recipient. Kant indeed allowed sensation as something given, but struck out at once to show that knowledge is possible only by the positive, constitutive, creative activity of the mind working on sensation. There cannot be knowledge of the many except as a one stands over against the many and sees them as many. The fundamental weakness in Berkeleianism is the lack of proper emphasis on a knowing agent which by its activities builds the "given" into knowledge. It

might not be fair to say that Locke ever intended the *tabula rasa* of the mind to be taken as a merely passive wax-like something on which an impression is stamped, but even if we could think of impressions as thus stamped on wax, they would amount to nothing until an active agent re-built the imprint into intelligibility by a constructive mental effort. With our modern knowledge of optics we know that an actual image of a visible object is projected upon nervous tissue in the human eye ; but the image does not see itself, nor does the nervous tissue see it. Who sees the picture ? A constructive mental agent has to see the picture, and seeing it means building it into consciousness. Ideas do not fall ready-made upon a *tabula rasa*. Even if they did thus fall they would have to be seen. No matter where they come from, they do not become ours till we re-make them in our own minds.

It is from the point of view of this activity of the mind in knowing that Kant is to be understood. The ideas of the mind are not, as according to Hume, a procession of phantoms, but distinct creations of an abiding and self-identical agent, which, abiding across the flow of events, knows itself as one and the same.

Kant seems to have been obsessed with a craving for complete system. He elaborates his doctrine of the unifying power of the mind through fearful and wonderful schemes of categories. There is a unifying principle for this, that, and the other—the principles over-wrought and often in one another's way. It would have been simpler to have set forth just one unifying agent—the conscious mind—acting through manifold categories as the expressions, or laws, of its own nature; but Kant could not be simple. Still, the main intent is clear. Kant seized as had no other the activity of the mind in knowing. He carried this so far as to make space and time forms of the mind's knowing and not realities in themselves.

Nevertheless, with this powerful and far-ranging instrument of the activity of a mental agent in knowing firmly in his grasp, Kant shrank back from the full use of it. At the outset he conceded " sensation " as something given in such fashion as almost to make it independent of activity on the mind's part, whereas full loyalty to the Kantian principle would have woven constitutive mental additions or interpretations into the inner centre of the sensation itself.

In a word, Kant seemed to feel that his categorical, unifying principles were in the nature of glasses through which the mind

looked out upon reality. He could not see reality except through the glasses, and felt that if we could see the fact which lay behind ("noumenal" is his term) it would be different from the "phenomenal" fact which the glasses reveal to us. Here we come upon a "thing-in-itself" which lies beyond the direct grasp of knowledge. Even behind the "phenomenal" self which we know in self-consciousness is a "noumenal" self which we can never know. A good deal has been made of the fact that Kant, like Hume, opened a door to scepticism. There is, however, a vast difference. Hume left little but scepticism—a compelling, provocative scepticism that could not rest in itself, but scepticism nevertheless. Kant, on the other hand, left a system full of fruitful, germinal conceptions whose entire worth has not yet been exhausted—perhaps can never be exhausted. His essential contribution was the finality with which he established the activity of the mind in knowing. Knowledge is a process. The thing-in-itself which haunted and obsessed the system of Kant disappeared in the solvent of later idealistic reflection—though such solvent was not altogether necessary, inasmuch as Berkeley had disposed of it so far as it was conceived of as inert matter. It is interesting to note, by the way, that students of Kant's life have considerable doubt as to whether Kant knew the work of Berkeley except through Hume.

Kant claimed that in his "Critique of Pure Reason" he had set limits beyond which the knowing mind could not extend its knowledge. He declared that so far as he had destroyed knowledge, he had done so to make room for faith. While he denied that the mind could by intellectual processes attain to a knowledge of God and freedom and immortality, the mind nevertheless had to hold fast to all three as "regulative" principles—necessary assumptions—to make the moral life possible. Nothing could be more exacting than Kant's insistence upon the categorical imperative as binding for any genuine moral life. In that moral life Kant held that the primacy must be given to the practical rather than the speculative reason. God, freedom and immortality must actually have the right of way. Kant could have been called a pragmatist, making values-in-use supreme, except that he had a deeper philosophical foundation than has any present-day pragmatist.

If Kant had closely studied Berkeley, or if he had followed him in his doctrine of the impossibility of a material thing-in-itself, he

might have left a consistent idealism. An acute philosopher has remarked that to reach a consistent idealism we have only to Kantianize Berkeleyanism. It has also been observed that if Kant could have cleared up the inconsistencies in his system by daring to utilize the creative activity of mind to the utmost there would have been but little for later idealists to do. Here again it will not be wise to pass strictures on Kant. It may be that his chief fault was in lack of clearness of exposition. There are passages here and there which seem to indicate that Kant meant by thing-in-itself something quite other than the mysterious, baffling unknowable which his words seem to indicate. Still, a philosopher's significance lies in large degree in what he is understood to mean.

V

NAWAB SALAR JUNG BAHADUR.

In a brief summary it is not possible to do justice to Fichte, who by his attempts to bring all activities within the scope of the Ego, prepared the way for Hegel (1770-1831). Kant, as we have seen, left philosophy with unknowable *noumena*, backlying realities, things-in-themselves, even after he had established the constitutive activity of the mind in knowing. The thing-in-itself was the challenge to subsequent philosophers. Hegel met the challenge by pushing the constitutive intellectual principles boldly out to the claim that Thought constitutes all reality. All reality is thought. Things must either come within thought or go out of existence. There is no thing-in-itself. This is Hegel's abiding worth for the philosophic movement. Moreover, Hegel went so far that he made the actual the rational. Thought is not some ideal to which we are one day to attain. Thought is not the realm of the abstract but of the concrete.

To Hegel is due the credit of laying new stress on system. Reality is constituted by relations and relations mean system. Kant had split Being into two parts—*noumena* and *phenomena*. Hegel sought to bring them together. Kant had left his phenomena without centralized unity, despite his own passion for formal classification. Hegel wove one net-work of relationships into which all Being must come.

Moreover, some features of Hegel's system were mightily productive for thought in realms outside of the specifically philosophic. His famous principle of thesis, antithesis and synthesis was used most

effectively by Ferdinand Christian Baur as a method for starting New Testament history on a new track, and his general philosophy of history was utilized for such diverse theories as Marxian socialism on the one hand and the Prussian supremacy of the State on the other. Hegel had great influence on English thought during the middle of the nineteenth century. At the hands of some English thinkers, notably Thomas Hill Green (1836-1882), the excellences and the faults of Hegelianism became clearer than in Hegel himself, whose expositions are laborious and involved. For example, Hegel at times seems to put Thought before a Thinker—or thinkers—allowing us to conclude that somehow Thought can posit itself in a Thinker. This confusion shows itself in Green, who, in his important “Prolegomena to Ethics,” swings back and forth between the notion of a self thinking the thought, and a presumably impersonal Thought somehow getting Itself made concrete in thinkers.

Confused and involved as is Hegel's exposition it soon becomes apparent to his reader that his fundamental weakness is his lack of provision for the actual world of nature, as we experience it. Hegel deduces too much, and his logical and metaphysical terminology fails to connect closely with the world as we actually see it. Not everything concrete will yield itself to thesis, antithesis and synthesis, or will come—except in the most general terms—within Being, Not-Being and Becoming.

VI

Suppose we glance back for a moment along the line over which we have so rapidly travelled. Locke found two substances—mind and matter. Berkeley abolished matter to establish mind. Hume took the Berkeleian doctrine of ideas to cut the foundations from under both matter and mind. This aroused Kant, who established the activity of mind in knowing, but left beyond the world of knowledge a mysterious realm of things-in-themselves. Hegel brought the things-in-themselves within the realm of thought.

This carries us to an essential problem not yet satisfactorily treated in the idealistic movement—the inadequacy of idealism to deal with the actual world of nature, if idealism deals solely with ideas. Berkeley was close to a statement of truth which might have marked out the course of all philosophy after his time if he had elaborated it more fully; the conception, namely, of ideas as expressing the will

of God. Berkeley, of course, was approaching his problem from the point of view of knowledge and not from the point of view of being. The doctrine that a thing can have substantial being only as it can act was not new in Berkeley's time. Ideas as acted into expression by the Divine Will would have filled a gap in idealistic thinking, which, left open, proved a serious weakness.

The course of idealism, since Hegel's time, we repeat, has been in the direction of a better attitude toward the world of nature and science. Berkeley's idealism was called, rather unjustly as I think, subjective idealism. The movement of fifty years past has been toward objective idealism—the outside world being conceived of not as a material stuff, standing alone on its own account, but as a set of forces acting ideas into expression. The well-informed idealist to-day would not question the existence of an objective world, but he would ask as to the nature of that world, insisting that it could not exist apart from thought acted into expression by will. In this he would find confirmation even in the present-day physics which conceives of matter in terms of force.

Locke, Berkeley, Kant, Hegel were theists in their personal belief; and the same acceptance of theism as a matter of belief has been claimed for Hume. No one of these thinkers made any important contribution to theism by direct effort at demonstration of the existence of God. Perhaps the most important contribution for theistic thought is Kant's argument for the impossibility of demonstrating the Divine Existence, and his open-eyed reliance on the primacy of the practical reason as the best basis for faith. Hegel thought he had not only established theism, but the Christian doctrine of the Trinity. The Hegelian trinity, however, is something far other than that taught by Christianity.

Still, these writers, taken all together, rendered yeoman service to the cause of theism. The constitutive activity of thought, the emphasis that being must come within thought or cease to be, the revelation of the utter scepticism in which we land by any other method, all these minister powerfully to theism. Kant himself teaches us that the building of theism is a matter of moral choice. If, however, we make such choice we find in idealism well-wrought foundation stones on which to build.

CHAPTER IV

TENDENCIES OF CONTEMPORARY PHILOSOPHY

BY BISHOP FRANCIS J. McCONNELL, PH.D., D.D., LL.D.

While the justice of Kant's questions is recognized by all, opinion is much divided as to the adequacy of his answers. Philosophy since his day has manifested the most varying tendencies, especially on account of the great advance in knowledge that has come through other sciences. Yet there is a constant tendency towards recognizing in the universe an objective order that is best conceived as proceeding from a personal purpose.

IF any single brief space of time can be said definitely to mark a turning point in the course of philosophic thinking, the period between 1859, the date of the announcement by Darwin and Wallace of the theory of natural selection in the origin of species, and 1862, the date of the publication of "First Principles" by Herbert Spencer, can be pronounced to mark such a turning-point. Starting with John Locke's theory of two substances—mind and matter—philosophy had seen Berkeley rid his thinking of matter as a substance, Hume cut the foundation from under both matter and mind, Kant gird himself to re-state the problem of the universe in terms of the constitutive force of thinking, and Hegel show that the thing-in-itself—left over by Kant as beyond the reach of thought—must come within thought or go out of existence.

Hegel died in 1831. In the thirty years that followed his death the Hegelian system was seen to be a great evolutionary statement—Being, over against Not-Being yielding to a process of unceasing Becoming; Thought manifesting itself first in a Thesis, which quickly called forth an Antithesis—the two finding reconciliation in a Synthesis, which acted as a new Thesis—and so on and on.

Hegel, however, moved deductively. He dealt with all human institutions, but not chiefly on the basis of observations of the institutions themselves. In thirty years men had become wearied of so much deduction. When Darwin announced that movement in the

organic world takes place through a struggle for existence, natural selection killing off those organisms not fit for their environment, and giving the field to those whose variations were such as to fit them for survival—these variations being preserved and accentuated by heredity—the world of thinkers gave a sigh of relief at having come back into closer touch with the reality of facts. Here was an evolution which seemed on the face of it to account for something. Herbert Spencer, acting indeed independently of Darwin, got the benefit of the desire for another kind of evolution than the Hegelian, and met the demand in his famous formula to the effect that evolution is the progress from an indefinite, incoherent homogeneity to a definite coherent heterogeneity through successive differentiations and integrations with concomitant changes in structure and function.

It is now over sixty years since Spencer gave this formula to the world and began to illustrate it with an incredibly multitudinous host of shrewd observations upon biological, psychological and sociological data. We have come far enough to estimate the significance of evolutionary thinking for the movement of philosophy.

We have first to recognize the enormous productiveness—or suggestiveness—of the evolutionary theory. Spencer's formula lends itself easily to ridicule before discriminating and exact scrutiny. If we have homogeneity to start with, we have something definite and coherent. Indefinite, incoherent homogeneity is a contradiction in terms. If homogeneity means sameness, sameness is sameness—definite and coherent—and out of sameness no difference comes. In spite of the cogency of this objection, I am not sure that it takes account of the beneficial productivity of an inconsistent statement. Was it not Napoleon who declared that the watchword of Revolutionary France—Liberty, Equality and Fraternity—was a cluster of inconsistencies, that if men are free they develop not equality, but inequality? He might have added, with Napoleonic cynicism, that if we make all men equal by law we do away with fraternity, and that if we allow them to be unequal unfraternal tempers develop. Yet in spite of this the revolutionary formula has been one of the most fruitful in the history of human society.

So with Spencer's evolutionary formula. About its fruitfulness there can be no question. All it can strictly mean is that evolution

is from the simple to the complex, and even this statement has to be handled with care, for much progress, especially in thinking, is from the complex to the simple. The evolutionary formula itself is an attempt at simplicity. Still the formula has been one of the immensely provocative and quickening utterances of the last century. It has supplied the stimulus for statement and re-statement in all the fields of philosophy.

We probably do not fail of doing justice to the evolutionary philosophy when we over-emphasize the modifications that have taken place in Darwinism, or the now-recognized truth that evolution does not solve any of the deeper questions of the universe; or the impotence of the theory to ensure progress, since degeneration can take place in harmony with the evolutionary formula; or the truth that the fittest to survive are not necessarily the ethically worthiest. All these objections are sound, but the evolutionary theory gains in force by the discovery of the limits within which it must move. Every philosophic system at the outset is in a sense imperialistic. It seeks to extend its lordly sovereignty in absolute fashion over all the realms of human thinking. After a season, however, the chastened philosophy is content to live within its own frontiers, where it serves with greater effectiveness than in its campaigns for world-wide rule. The true realm of evolution is in the statement of process. The permanent contribution is in the emphasis on a method—more or less the same—which rules all realms of life. No matter what happens to Darwinism, or Lamarckianism, or even Spencerianism, the thought of evolution as a process according to a plan which in general can be stated as binding past and present and future together in a developmental scheme, will always have its influence for human thinking, especially when that thought looks toward theism.

It is worthy of note that the Great War, which is supposed to have checked the emphasis upon one feature of evolutionary theory, namely the struggle for the survival of the fittest, has not led to discount of the theory as a whole. The war has shown that struggle for existence is havoc-making upon the doctrine of the survival of the fittest. In war the best elements of a nation's population die first, so that while the strongest nation may survive, the best elements in that nation, and in the defeated nation, perish. The emphasis now has turned toward mutual aid among all social groups as the

condition of survival; all must rise or fall together, all must together struggle for existence not against one another, but against disease and ignorance and selfishness on a world-wide scale, a struggle which can be successfully carried on only as the masses of mankind organize into humanity-wide unity.

II

Much of the conventional exposition of evolution gives one the impression that the organic forms are largely plastic before the play of the external, environmental forces. It is true that the essential Darwinian phrase is the "struggle for existence" and it is also true that more recent evolutionary speech tells of unfoldings according to a plan immanent in the organism, and of the power of organism, when once a particular organ is destroyed, to delegate the work of that organ to some other part of the organism, even creating a virtually new organ for the purpose. Still, the accent in the more orthodox evolutionism is on the forces outside of the organism rather than on those within. It has been the task of Henri Bergson to set before us a creative evolution, an inner life moulding forms to its own purpose. Instead of the environment conceived of as shaping life we must think of life as shaping the environment.

The works of Bergson are written with characteristically French lucidity. It is a delight to read them. Probably it would be better to say that the work of Bergson is to be experienced rather than read. The student will best understand Bergson by surrendering himself to the swift, but smooth-running stream of his style, by feeling a sort of immersion in that life whose primacy means everything to Bergson.

As soon as we ask questions difficulty begins. What is life? Perhaps we would better spell it with a capital, for it clearly does not mean separate individual lives as we know them. We are dealing with life as *elan vital*, with a vital urgency and push which affects everything with its tingling creativeness. Stiff, stolid matter as we see it arises when life currents seem to slow down, or to lose their abounding vitality. Mind as intuition—almost as instinct—is Life at its intensest degree. Every step taken by intellectual reflection is a step toward inertness and deadness. "Duration" is conceived of as sheer fullness of inner life. In a whimsical and not over-serious discussion of humour, Bergson tells us that even humour comes out

of the grotesqueness of the stoppage of the flow of vitality. A man makes a spectacle of himself by clumsily stumbling. The humour is in the incongruity of the sudden stop of a moving, forceful progress.

Bergson solves no ultimate problems. He does not reckon with the problem of evil, or error, sufficiently. He does not provide for a community of intelligences. He disparages intellect, even though his own system is a creation of a fine intellect spinning its most slender threads. Yet we can pardon much to Bergson for his insistence on Life, indefinite as is the term in his hands. He leaves place for spiritual freedom, for though in the creations of Life one part conditions another, the whole is the result of freedom in creative activity. Some theists have taken Bergson's *elan vital* as an excellent description of the creative activity of God. There can be no doubt as to the wholesomeness of Bergson's philosophy. It has proved tonic in an age likely to lose itself in the play of mechanical and unspiritual powers.

III

Further emphasis on the claims of Life as such may be said to give force and point to many of the current phrasings of pragmatism. William James (1842-1910) has been the most prominent American teacher of pragmatism. If we study James—not merely the James teaching, but James himself—we get a good view of pragmatism in its workings. James began his career with a thorough-going study of human physiology. From that he passed to psychology. He had been brought up in a home but little hampered by convention, and out of his youthful freedom and out of his actual experimentations with bodies and minds, he was led to a resentment against the hard-and-fast thought systems in vogue in his time. He believed that any theories of idealism—as of absolutism, which gives us a static, or “block” universe—are hindrances to all thinking. Truth for James was the actual worth of an idea in living. An idea is true so far as it works. A humorist once characterized pragmatism as the doctrine that the truth of an idea is whatever you can “cash it in for” and get for it in payment in life. More bitter critics—and pragmatism has its bitter critics—have declared that, according to pragmatism, truth is a lie that will work.

James made much of the “will-to-believe.” We cannot tell, as

we face two indeterminate courses, which is actually the better. So we try them out in life. We accept one of them on trust and see what the results are in life. If the accepted belief "works" we hold it as true, as far as it works.

James set his doctrine forth in English which is a perpetual delight. His books are excellent reading regardless of their content. The aptness, the force, the beauty of the James figurative utterances are a permanent contribution to American literature. The suggestiveness of the figures also has fastened the philosophy on the thinking of the English-speaking world for a long time to come. One legitimate criticism is that James's thought stamps itself so much on the figure of speech that if we destroy the figure we destroy the thought.

It appears almost from the outset that pragmatism is a method rather than a system. Pragmatists reject systems—especially if they show any tendencies to become finished. James certainly had no system. He seems to have relied much in his own thinking on Darwin and Mill and Spencer. He did not accept the doctrine of a substantial spiritual agent of the kind we mean when we speak of soul, or self, or mind. He believed in a "stream of consciousness" with ideas floating in the stream with a sort of "free water" of relationships around and between the ideas. Still James did not draw from this doctrine of the self as a stream the conclusions usually drawn from such doctrines. Nobody in our time has stood more staunchly for the rights and dignities of human personalities. He does not object to personal immortality for human beings. The stream of consciousness may go on indefinitely. There may be a "mother" sea behind, or above, the individual stream. When the barriers between the sea and the streams are down the streams may become bank-full of a life which we can truly call divine. There is theism here, of a sort, though a finite God was all that James would allow.

John Dewey, the second outstanding leader of American pragmatism, seems to prefer to call his system "instrumentalism." We make all sorts of tools with which we adjust ourselves to life—intellectual tools, as well as material. Thoughts, concepts, systems are instruments which men have worked out to further life. Dewey seems to make the actual instant of living the end-in-itself. Formal conceptions are of value as they help on to that actual living. Dewey's aim seems to be the training of human beings to live

together in social relationships. He would say of any religious system—probably even of Christianity—that it is worth whatever we can make out of it as an instrument of living. The deeper problem of the truth of the system as correspondence with any sort of reality he would probably dismiss.

F. C. S. Schiller, of Oxford, calls his own vision of pragmatism by the title humanism. For Schiller the human being is an outright creator. Thinking makes things true. When we think something not hitherto thought we have created. Being itself is thus plastic and fluid.

IV

All these systems are alike in their emphasis on human values. They are protests alike against the old-type of materialism and the old type of idealism. Life is what we make of it—with men the masters of their destinies. As in the case of Bergson, there can be no question of the wholesomeness of pragmatism—up to a certain point.

The weaknesses soon appear. The place of the external world in the doctrine is in doubt. Much as the pragmatists resent the charge of a subjectivism almost as extreme as Berkeley's is commonly alleged to be, it must be said that they have not yet successfully answered the charge. When it comes to the problem of the neighbour, the pragmatists are mostly pluralists, with lives existing presumably in their own right. As to theories, it seems that we can believe what we please.

The theory of pragmatism meets difficulties as to its scheme of values. What does "working" according to the pragmatic scheme mean? Does the lower order of practical values have the right of way as determinative of truth? If we say that there are high intellectual values which are true as they satisfy us, that comes near surrendering pragmatism altogether. We are back with the mind's own right to know. Just what is the practical value of the Copernican system of astronomy as compared with the Ptolemaic? The Ptolemaic can be stated so as to make it as useful for the measuring of time and for navigation as the Copernican. It is hard to see how the Copernican system could have been arrived at by emphasis on values that will "work," except in the sense of satisfying the mind. If, however, we give the mind a set of standards of its own we are off



HERBERT SPENCER.



G. W. F. HEGEL.



AUGUSTE COMTE.



HENRI BERGSON.

MAWAB SALAL



JEAN JACQUES ROUSSEAU.



ROUSSEAU IN HIS GARDEN.

the track of pragmatism as ordinarily understood. "Working" a problem in higher mathematics does not seem to be the same practical kind of working that the pragmatic doctrine calls forth.

So much emphasis on the will-to-believe was sure to call forth a reaction toward a will-not-to-believe. Continual emphasis on the will-to-believe as a creative power seemed to many to lead to the grotesque and fantastic, to do away with the common-to-all which seems so self-evidently a part of our experience. Hard-headed realists in all periods of human thinking have rendered service by sheer stubbornness, if in no other way, in insisting that there is an objective world which is given to us, which we do not create, which we cannot avoid by any kind of subjectivism. The realists, however, are stronger when they are positively affirming such an objective order than when they are trying to give philosophic statements concerning it. The moment they begin to expound realism we have the transfigured realism of Spencer, or the critical realism or the neo-realism of the present day. Both transfigured realism and critical realism have to concede so much to the activity of mind in knowing that what is left is an "essence," or backlying centre of forces utterly unlike anything we actually see. The most determined realist of to-day would admit that the outside fact in colour is a set of vibrations, which we could not by any theory "see." What would the world look like looked at in itself? There would be no "look" about it. In itself it would be a set of vibrations. To be sure we might feel something extended, but even into that feeling mental activities would enter. It is hard to distinguish some forms of realism from some forms of objective idealism.

Bertrand Russell has sought to explain the universe in terms of "neutrals," by which he seems to mean some actually existing stuff or stuffs which are neither material nor mental. The photograph of a star on a sensitive plate and the perception of a star by a sensitive mind are at bottom identical, or rather they are neutral. One is sense-data and the other is sensation. The Russell reasoning is extravagantly subtle, but seems to mean that there are entities which are neither mind nor matter—they somehow actually seem to be mental content and at the same time seem to have material content. Something which is actually outside of mind as we think

of mind actually becomes part of mind as it truly is, and presumably constitutes true knowledge. How far this is from common-sense realism is obvious. It is a sort of neo-realistic mysticism; the mental and the material almost inter-changing, somewhat as the mystic conceives of the human as actually losing itself in the divine.

To Russell and those of his school must be given credit for taking the problem presented by an outside world seriously. The ordinary realist, for example, conceives of space as actually "out there." Or the objects are in space relations. Ask the realist now if he believes that space relations are a product of a relating activity of mind,—and he hesitates—probably affirming at the end that space would be there as a vast empty "room" whether there were any material things in it or not. The further question as to how we could think of something as existing which can neither act nor be acted upon he would impatiently cast aside as a metaphysical quibble. The common-sense realist, in other words, does not take the space problem with notable seriousness. Mr. Russell takes space, and time also, seriously. Russell is a mathematician of high order. He has been deeply impressed with the Einstein theory of space, or of the space-time continuum. Presumably whatever there is in what we think of as space, or time—or matter, indeed—is a part of that which on the one side is seen as sense-data and on the other side as sensation.

On the Russell theory there is the most revolutionary overturning of common-sense realism as to the outside world. There is no place for self in any particularly substantial existence—no provision for system that will hold together. It is hard to see how the doctrine can save itself from the charge that it reduces everything to a procession of mathematical instants, with each one more or less like its immediate neighbour.

It has been said of Russell that he has with a sharp instrument pared reality down to its barest elements. The expression is a happy one as suggesting the keenness of the edge of Mr. Russell's instrument, but the instrument itself is the product of a type of intellectual forging and tempering which his own theory of mind would never make possible. Russell works with intellectual tools of a rare quality. He illustrates in himself the extraordinary lengths to which the constitutive activity of the mind can carry itself. Kant would

have liked no better illustration of the fundamental activity of the mind in building up knowledge than the elaborate, fine-spun, artificial creations of Mr. Russell. The system is a revelation of the extremes to which intellect can go in self-abnegation. The force at work is the will-not-to-believe—as subjective an interest, by the way, as the will-to-believe. The denial is not that of a blind man who would say: “I do not see anything,” but that of a keen-sighted observer, deceived into thinking he was blind and saying: “Behold how many things there are here and there and everywhere—flowers, trees and clouds—that I do not see.” There is but little place in the system for a standard of truth or right, even though Mr. Russell is one of the most fearless critics of what he believes to be false or wrong. There is little place for human personality in the philosophic system of one who is himself willing to defend his conception of the dignity of human personality at unspeakable cost to himself. In the making of the Russell paring knife have worked all, or nearly all, the forces whose existence Russell denies.

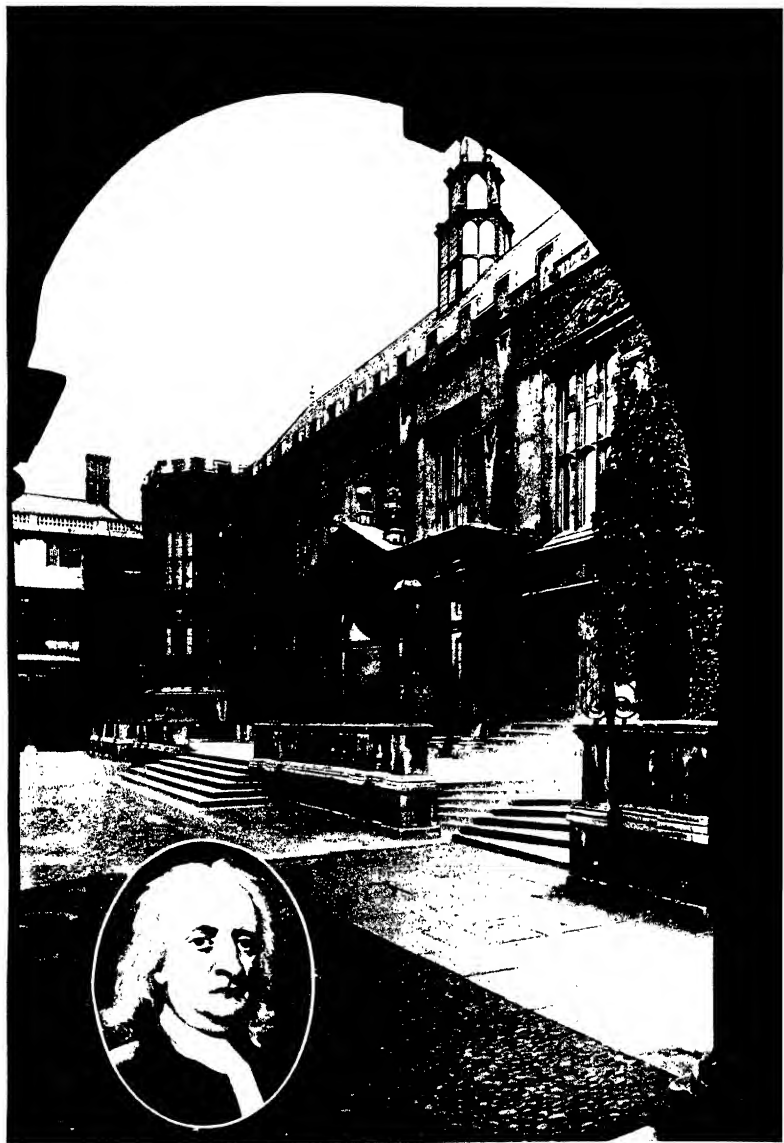
VI

Among the various tendencies at work in the philosophic realm there are in almost every land in Christendom those who are seizing from the seething cauldrons of to-day’s inquiry elements which they are fashioning into a more or less consistent theism. It is being increasingly recognized, for example, that pragmatism is no new thing, that in philosophy it is akin to Kant’s emphasis on the primacy of the practical reason. Pragmatism is a method. Kant assumed God, freedom and immortality to make a moral and spiritual universe. If we can lift pragmatism up, away from the lower order of practical considerations, and make it stand for life’s postulating the highest conceptions toward which it can reach, and then testing these by the satisfaction in life itself, we have a method which can lead to theism. Out of its craving for truth the mind postulates a knowable universe. Out of its feeling after beauty it postulates a source of beauty. Out of its total demands for increasing life it postulates God. The belief in God is a sort of royal seizure on the part of life itself according to what may be called a principle of spiritual eminent domain.

Idealism at present seems to tend toward the larger recognition of an objective order constituted by mind indeed, but not by finite

minds. An Italian movement, with Benedetto Croce as its most noteworthy exponent, has formulated what has been called a neo-idealistic statement which has been rather hard pressed to defend itself against the charge of pure subjectivism. The general tendency in idealism, however, is toward the recognition of an order which men do not make but find. The tendency has been furthered by the emphasis of physics on matter as construable in terms of forces. Atoms are no longer thought of as solid little lumps under which or beyond which our thought cannot go. The ultimate reality that the physicist can reach is centres of force, or of electric energy, or of ether strains. This delivers us at once from the notion of matter as a hard-and-fast something in itself and lends aid to the idealist and even to the theist. It is possible to conceive of these forces as expressions of a will acting according to idea, or plan. This is all that objective idealism needs so far as matter is concerned. Here is provision for reality outside of our minds, but not outside of all mind. It may be fairly asked whether the idealists are not taking it too easily in assuming that with the physicist conceding forces as the ultimate physical realities the victory for idealism is won. The physicist conceives that these forces work in space, and with space existing as real outside of mind the battle for idealism is not won. Moreover, the advance beyond the atom to forces does not logically give us undifferentiated force. It gives us forces—with their multitudinous diversities blanketed under a class term.

The physicist, I repeat, holds before us an order which we do not make but find. The increase of scientific knowledge concerning this order more and more shows that it is independent of human minds, except to a limited degree of intelligibility and usability. The dignity of the human intellect is in nothing more marvellously revealed than in the conquests of science, but the conquests move within limits. The discovery of the limits is itself a triumph of mind—but the discovery is manifest—immense reaches of physical existence are irrelevant to any human purpose that we can discover. The frank recognition of this implication of the Copernican theory, however, does not mean that a universe which is beyond our mental grasp is beyond all mental grasp. The appalling vastness of the physical universe, its apparent indifference toward many spiritual ends which seem important to men, the ruthless march of its powers to some outcome beyond us, have led some thinkers to conceive of



TRINITY COLLEGE, CAMBRIDGE, WITH PORTRAIT OF ISAAC NEWTON, WHO WAS MADE A FELLOW.



GALILEO BEFORE THE PAPAL TRIBUNAL.

a limited theism in which God is finite—Himself struggling against a morally indifferent universe. The facts which lead many to reject the belief in a God who is at the same time good and almighty have never been better stated than by John Stuart Mill. Such insistence upon a finite God is more valuable, however, as a statement of a perennially recurring human mood than as a contribution to philosophy. A doctrine of a finite God usually ends in putting over against such a God a veiled reality in dealing with which all the philosophic difficulties reappear.

English idealism still shows signs of its Hegelian ancestry, though the emphasis throughout has been away from subjectivism to a thought order which is more than the creation of finite minds. The Hegelians of the stricter sort have never quite shaken themselves free from the tendency to oscillate between thinkers thinking thoughts, and Thought, spelled with a capital, somehow getting itself incarnated in thinkers. An interesting use of the Hegelian instruments was made by F. H. Bradley, in "Appearance and Reality." The Hegelian dialectic has usually insisted that relations are constitutive of reality. Bradley reversed this claim and declared that anything into which relations enter is riddled with inconsistency and is therefore appearance. His sceptical achievement was as thorough-going as that of Hume; his constructive attempts were far from satisfactory because of the manifest impossibility of reconstructing without relationships.

The latest idealistic trends, both in England and America, seem to be personalistic. The idealism recognizes the objective order, but maintains that not ideas, or wills, but persons, living a full-orbed personal life, are the fundamental facts. Borden Parker Bowne (1847-1910) has in America given personalism effective enough statement to win the approval of thinkers as far apart as William James and Rudolph Eucken. According to personalism the universe is indeed carried on according to the purpose of a God conceived of personally—without the limitations of finite personality, but possessing Self-consciousness and Self-direction. Being grounded in intelligence and plan, the objective universe is the plane in which finite persons, posited by the creative activity of the Supreme Person, meet in a social community. The doctrine would probably be accepted by most theists of to-day except at the point of its emphasis on idealistic elements. Thorough-going personalism makes the

categories of the mind descriptions of the methods of the mind's acting and not impersonal realities ruling the mind, and makes the nature of physical activities into statements of the methods of those activities. Space and time become mental forms. In this pronouncedly idealistic form personalism has not yet met large acceptance, but the idealistic trend seems at the present hour to be personalistic.

CHAPTER V

ETHICAL ASPECTS OF MODERN PHILOSOPHY

BY BISHOP FRANCIS J. McCONNELL, PH.D., D.D., LL.D.

The task of philosophy is to interpret the world in which we live; the task of ethics is to direct our lives in the world so interpreted. And while confusion in philosophy necessarily produces confusion in ethics, yet the modern trend towards emphasizing the importance of personality seems to be leading towards an increasing agreement in ethical theory.

IT may be worth while to note briefly the attitude of the various philosophical schools of the present day toward moral aims and methods. Far apart as are the many philosophies in their interpretations of man and the world, they come amazingly close together in emphasis upon the moral values.

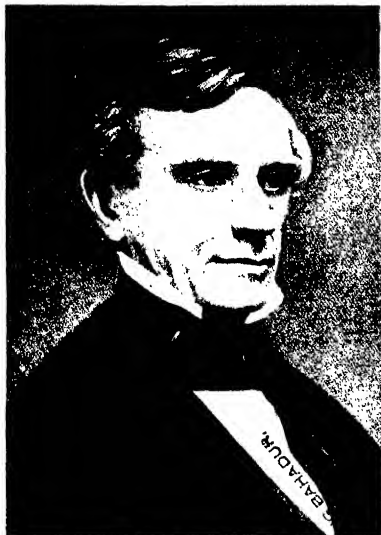
Kant said that the moral person is always to be taken as an end and never as a means. It is immoral to use men as instruments, or raw material for any cause that overlooks the human values. We must not, of course, forget that in the land of Kant the philosophy that came out of Kantian principles lent itself to the exaltation of the State as a sort of super-personality in whose power individual human beings were as nothing, but this was a radical departure from Kant's thought. The ethical philosophies that to-day seem really to be counting as effective forces are as insistent as Kant upon the need of conceiving of the moral personality as an end-in-itself.

For example, the evolutionists for the most part unite in putting man at the apex and climax of the evolutionary process. On the basis of exact scrutiny of the workings of nature it is easy to say with Huxley that nature is indifferent to ethics. Tennyson may have gone too far in declaring that "Nature, red in tooth and claw with ravin, shriek'd" against our creed, but nature at least seems to keep silent about the moral creed. This point of view is flatly opposed by the evolutionists of the Drummond or Kropotkin type, who see an ascent of man in nature, with all phases of nature

co-operating to set man on high. The point to be held in mind is that when Huxley declares that nature is non-moral and that moral considerations must be introduced into the cosmic process, and that when Drummond declares that nature is moving with moral purpose throughout, both are conceiving of the moral person as the end toward which nature is working, or should be made to work. The vigour with which evolutionists insist that man is the crown of all things is a tribute to the effectiveness with which the idea of man as an end in himself has taken hold of the mind of our time. When the pessimist tries to get a hearing for his claim that the same natural processes which have woven man may unweave him, the evolutionist is apt to dismiss the pessimism with the comment that there are yet unexplored possibilities in nature which can be depended on to supply man with the means of maintaining his achieved supremacy.

Of significance also as assigning chief place to the human values are most types of social theory, no matter what their formal philosophic basis. He would be a hardy commentator who would try to show that the social theory of Karl Marx is anything other than materialistic. The most that can be said is that Marxianism of the orthodox type need not be materialistic, yet this materialistic theory puts the moral values in the first place. The social evolution of human institutions moves along indeed with impersonal inevitability, but its outcome is to be human welfare. When Karl Marx wrote to Abraham Lincoln assuring him of support in the struggle for human liberty, he was voicing the passion for human values in which the Marxian philosophy was conceived. The admitted fact that many Marxians interpret human welfare in crassly materialistic terms ought not to obscure the other admitted fact that some Marxians who have been most materialistic in formal statement have been most idealistic in their attitudes toward their fellow-men.

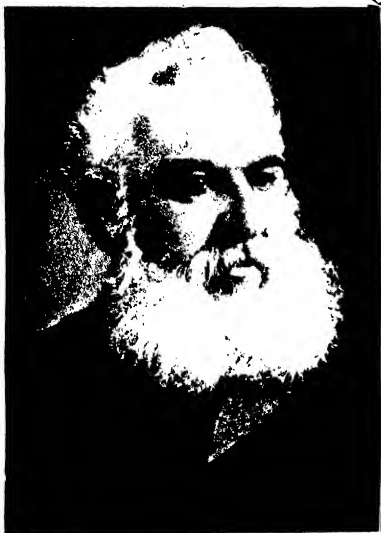
No two thinkers could be farther apart in formal philosophy than Kant and Bertrand Russell, yet Russell is quite as persistent in advocacy of the human personality as the end-in-itself as is Kant. It is hard to see how Russell makes any provision for personality at all adequate and yet he protests against sins against the human ideal as forcefully as any man in our time. He would radically make over all our institutions, industrial, national, educational,



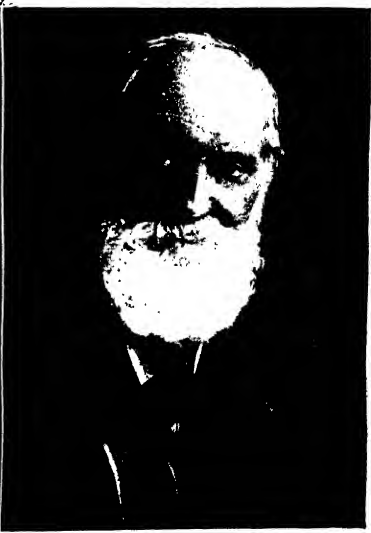
S. F. B. MORSE.



G. MARCONI.



A. G. BELL.



LORD KELVIN.

(*Photograph of Lord Kelvin by T. & R. Annan & Sons, Glasgow.*)



domestic, for the sake of giving the individual life its chance. If Russell is a Socialist he is socialistic with an individualistic aim. He is seeking to exalt the claims of individual men, women and children. When a thinker is willing to go to prison for the sake of arousing such beliefs, strictly logical inconsistencies should not be allowed to weigh too heavily against his significance as an ethical force.

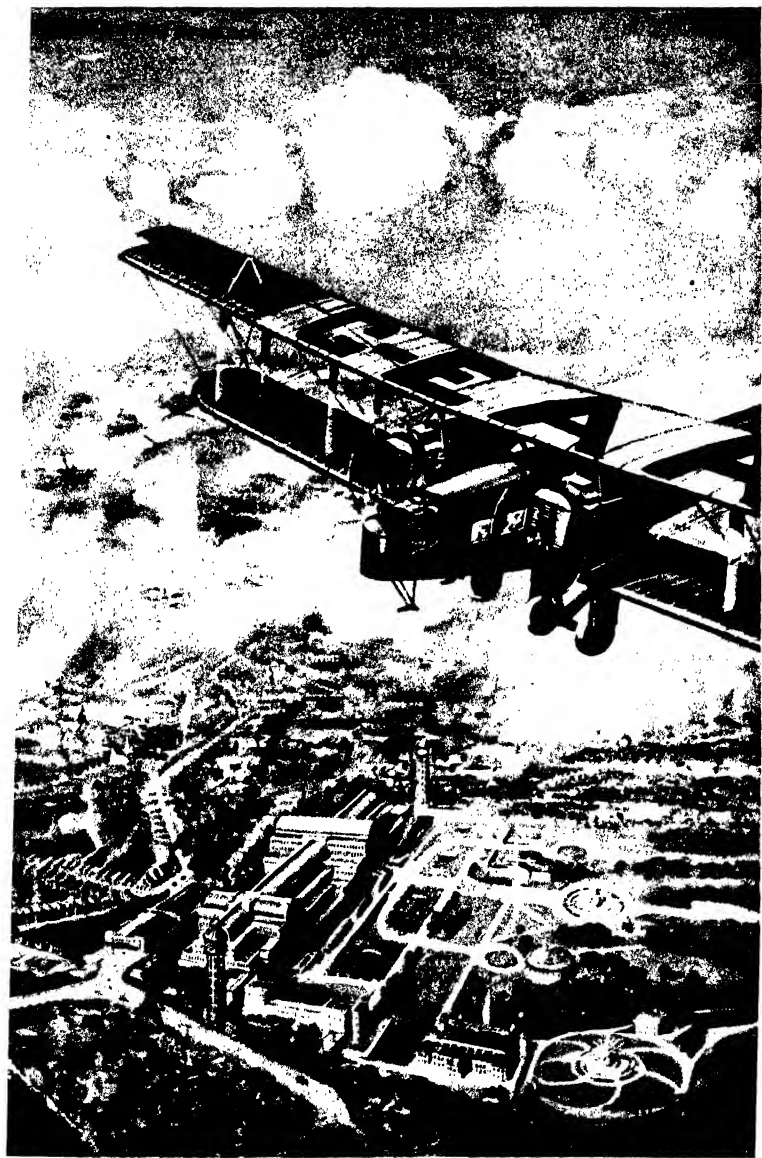
Idealists, realists, personalists—even materialists—largely agree on the human values as the high aim of moral endeavour. There is increasing agreement also upon the self-realization of persons by service of society as the true moral aim. Few moralists, of whatever school, would to-day insist that a person attains moral life by deliberately making his self-realization the end of his own effort. Selfishness never has received less open support. All are at least approaching agreement in the position that a society of persons, in which each person aims at the good of the whole, is the field in which the individuals come to highest selfhood. There is large agreement also that the present human life, with men's ordinary round of common duties as members of families, of neighbourhoods, of states is the sphere in which moral character is to be chiefly achieved. Normal human life in the fulfilment of its best possibilities is the common aim.

There is at least approach to agreement between the intuitionist and the utilitarian schools—the intuitionist showing more and more willingness to accept consequences in living as the indication that the intuitions are on the right track, and the utilitarian urging as strongly as the believer in the categorical imperative the obligation to seek for the conduct which will lead to the best consequences. In the interpretation of consequences there is of course difference of opinion. In the wider social realms the standard is for the most part that of Sidgwick—the welfare of the largest number, with the emphasis on the practical in results. Actually, in this realm, there is wide diversity and disagreement. In individual realms the intuitionists claim that inner, as well as outer results are to be reckoned with, some of these inner spiritual results having no considerable way of reporting themselves in the outer realm of physical fact or event. One of the charmed words of the day is loyalty, Josiah Royce going so far as to exalt loyalty to the ideal of loyalty itself as the worthiest aim of human endeavour. It is evident that the intuitionist can justify many inner loyalties

which make no report or stir in the outer world. It is evident also that the utilitarian can reply that the good person—good in these inner loyalties—is a most useful member of society by the fact that he is what he is.

Finally, the manifold ethical points of view converge upon the need of sanction of human ethics by world-philosophy. The sterner moral requirements admittedly call for a belief that, whatever the system, morality must be constitutionally woven into the texture of the universe itself. Each philosophy seeks to utter moral encouragement. To recur once more to Russell: he finds the supreme challenge in the frank facing of a universe which says "no" to our traditional spiritual hopes. For Russell the noblest moral fact in the universe is a person who looks out upon a black universe without bitterness, who, single-handed if need be, fights for the human values, knowing that after a brief moment he will go down into darkness. With idealism such as this all merely utilitarian values have ceased to count. So far as sheer rigour of moral demand is concerned, the temper is as thorough-going as that of Kant, who declared that if Society were to learn that it would in a few moments cease to exist, it should forthwith proceed to execute all criminals justly doomed to death as a last tribute to the exact demands of moral law.

In fine, underneath almost all ethical theorizing of to-day runs the assumption that, whatever the formal theory, scope must be found for the play of idealistic factors. In their very anxiety to make scope for such play is a witness—grudging indeed but real,—to the worth of those features of ethics which find their best satisfaction in the belief in the existence of a Supreme Being.



BOOK II

CHRISTIANITY AND SCIENCE

The nineteenth and twentieth centuries are characterized by advances in scientific knowledge and by increasing acceptance of the scientific outlook. The evolutionary theory has affected profoundly our view of life and its problems. Philosophy has undergone a wide transformation. Psychology has become virtually a new science. Sociology has raised questions undreamed-of a generation ago. The rigorous methods of modern historical criticism have been applied searchingly to the documents of the Bible itself. How is the Christian position to be upheld in the midst of so wide a readjustment?

Science, properly speaking, is simply knowledge; but in present usage the word points rather to that knowledge which is the fruit of systematic observations and experiments in the natural realm. In the ancient and medieval worlds men preferred to devote themselves to more general and abstract thinking. The turning of men's minds outward to the phenomena of nature has resulted in a body of knowledge which has transformed incalculably our manner of life and—though perhaps to a less degree—the terms in which we think.

- Chapter VI. BEGINNINGS OF MODERN SCIENCE
- VII. THE SCIENTIFIC METHOD AND THE
NEW PHYSICAL UNIVERSE
- VIII. EVOLUTION IN ITS RELATION TO
CHRISTIANITY
- IX. MODERN PSYCHOLOGY AND CHRIS-
TIANITY

CHAPTER VI

BEGINNINGS OF MODERN SCIENCE

BY PROF. J. ARTHUR THOMSON, M.A., LL.D.

The preliminary steps that rendered the great strides of modern science possible, and the varying views of Nature held by various authorities at different periods. Although the emergence of living organisms remains quite obscure, their existence leads to the conclusion that Nature is Nature for a Purpose.

THE advance of science in the twentieth century has been so extraordinarily rapid that we are apt to forget the preparatory steps that made the great strides possible. We think of the new view of the constitution of matter, the new "atomic" or "quantum" theory of energy, the experimental study of heredity, the recognition of the rôle of the ductless glands, the disclosure of the importance of "the Unconscious," and the doctrine of relativity, as a few of the prominent advances of the first quarter of the twentieth century, but all of these are shoots from old roots. It is the object of this article to refer to some of the great foundation-stones on which has been reared the stately superstructure of modern science.

I. THE ADVANCEMENT OF SCIENCE

There are diverse ways in which a science advances, and it may conduce to clearness if these are distinguished. (a) In some cases there is the discovery of a new thing or process. Thus in 1896 Becquerel discovered Radio-activity—a new phenomenon; and this has revolutionized chemical and physical science. (b) Or it may be that something old and familiar is seen in a new light. Thus physiologists had been for a long time well aware of the ductless glands, such as the thyroid, the supra-renal, and the pituitary, before they got a glimpse of the fundamentally important rôle that these obscure organs play in regulating the life of the body. These duct-

less or endocrine glands produce subtle chemical messengers or hormones, which are distributed by the blood throughout the whole system and secure the harmonious working of the various organs. These hormones are like floating keys that open certain doors which they find shut, and close others which they find open. It is now well known that the health of the mind, as well as of the body, depends on the regulative action of the thyroid gland. The hormones orchestrate the body.

(c) A third kind of scientific advance depends on a new idea, such as that of the Conservation of Energy, to which we must afterwards refer. It is almost a commonplace to us, but it was once an epoch-making new idea that in a series of operations no power is created or destroyed, there is only a changing from one form of power to another. Similarly, Mendel introduced a *new idea* into the study of heredity, though it is, of course, true that his work rests on concrete experiments and observations. (d) Another kind of advance depends on a *new contact* or collaboration between two sciences or departments of science. The very promising modern science of biochemistry is the outcome of a deepened co-operation between chemistry and biology; and some of the changes that have made psychology a new science, in the course of this generation, are due to its having joined hands with physiology.

(e) Another kind of advance, very familiar to us all, depends on the invention of a new instrument of research. Thus, to take one of the best examples, the spectroscope made astronomy a new science; and they carved on Fraunhofer's tomb the fine epitaph: *Approximavit sidera* (He brought the stars near). The ultra-microscope has made it possible not exactly to *see* the invisible, but to make the presence of invisible bodies photographically detectable, as Mr. J. E. Barnard accomplished so skilfully in connexion with the micro-organism of cancer. This ingenious "ultra-microscope" method has already thrown much light on the nature of living matter. We might also mention the radiograph and other ingenious extensions of our senses.

(f) Perhaps we should also distinguish advances that are due to the introduction of a new organon, not of an instrumental kind. We may refer, for instance, to the use of statistical methods in anthropology and biology, or to the use of graphs and similar devices. Every application of mathematics to a new field indicates

a step in the advancement of Science. *For Science begins with measurement.*

2. THE SCIENTIFIC RENAISSANCE

Early in the seventeenth century the spirit of scientific inquiry, previously expressed in isolated individuals, began to be widespread. Many factors contributed to this scientific renaissance: the breaking down of authority, for even Aristotle had become a tyrant; the encouraging fruits of independent observation and experiments by such initiators as Copernicus and Kepler, Galileo and Gilbert; the increasing knowledge of the world—many “Columbus voyages”; the circulation of books after the invention of printing; the founding of learned societies like the Royal Society of London (1662) and the French Academy of Sciences (1666); besides deep social and emotional changes which reperculated on science. But the individual genius counts, and much of the emancipation was due to the work of two great men, Francis Bacon (1561-1626) and René Descartes (1596-1650). Their achievements are alluded to in other chapters.

3. SIR ISAAC NEWTON

The scientific renaissance during the early years of the seventeenth century was followed by one of the most splendid periods in the history of science—comparable in brilliance to that in which we are now living, but it was more important since it had so much to do with the laying of foundation-stones. It was during this Golden Age that Isaac Newton was born, on Christmas Day, 1642, the year of Galileo's death. What can be better said of him than the poet's words:

“Nature and Nature's laws were wrapped in Night:
God said: Let Newton be, and all was light.”

Here we would quote a good sentence from Dr. Ivor Hart's admirable “Makers of Science” (1923): “Towering head and shoulders above all his contemporaries, a veritable giant among the giants, a man whose intellect and whose contributions to knowledge are incomparably greater than those of any other scientist of the past, was that prince of philosophers, Sir Isaac Newton.”

What foundation-stones did he lay? The law of gravitation, which describes "how every particle of matter in the universe is altering its motion with reference to every other particle" is the finest instance the world has known of a thought-economizing unifying formula. His laws of motion are moving still; his "*Principia*" must be ranked as most important of all works on natural philosophy; his corpuscular theory of light has been subsumed once more, along with the undulatory theory, in Sir J. J. Thomson's recent solution of that supreme mystery; to Newton, along with Leibnitz, is due the discovery of that extraordinarily powerful instrument of investigation—the calculus. On being asked by the Queen of Prussia what he thought of Newton, Leibnitz replied: "Taking mathematicians from the beginning of the world to the time when Newton lived, what he had done was much the better half." Dr. Ivor Hart also quotes Playfair's sentence: "No one ever left knowledge in a state so different from that in which he found it." What an epitaph for angels to look into!

4. THE CONSERVATION OF MATTER

One of the foundation-stones of science, on which every worker now builds with unquestioning confidence, is the conservation of matter. We can neither create nor destroy the smallest particle; the elements which enter into the composition of the soap-bubble film are fundamentally as lasting as those which form the granite rocks. The modern expert can bombard an atom of nitrogen and, so to speak, blow hydrogen particles out of it; but there is no possibility of destroying or creating the units out of which an atom is built up. Everyone knows how the state of matter may change from gaseous to liquid, from liquid to solid. Who has not watched "water" in the country, from vapour to dew, from dew to crystal, from evanescent jewel to flowing water again? The combinations which the various elements form may wholly change, as they do when the barrel of gunpowder explodes, but in all such changes the amount of matter is the same in the end as it was in the beginning. As Professor Ostwald puts it, "the total mass of the substances taking part in any chemical process remains constant." The weight at the end equals the weight at the beginning. The recognition of this fundamental fact of the conservation of matter, or better "mass," is to



ARCHIMEDES.



AN EARLY DYNAMO (INSET) AND ITS MODERN DEVELOPMENT AT THE NIAGARA FALLS POWER STATION.

the credit of many investigators, but it should be particularly associated with the French chemist Lavoisier (1743-1794), beheaded by a populace who had "no need of savants." Having constructed what was at the time the most perfect balance in existence—so rough and ready compared with Professor Pregl's to-day!—Lavoisier vindicated the universality of the principle of the conservation of matter. This was not only a foundation-stone, but a touchstone for chemistry, since it became a quantitative test by which the accuracy of research could be continually tested.

5. THE CONSERVATION OF ENERGY

Another of the scientific foundation-stones is the fact of the conservation of energy. There is no creation or destruction of power; nothing is ever lost. As Clerk-Maxwell said: "The total energy of any material system is a quantity which can neither be increased nor diminished by any action between the parts of the system, though it may be transformed into any of the forms of which energy is susceptible." It must be noticed that in a series of transformations the energy tends to sink down into some less available form, such as, finally, that rapid movement of particles which we call "material heat." But the big laboratory fact is that in any closed system in which a series of operations takes place, the amount of energy at the end must be the same as at the beginning, if the energy of the work done is taken into account. What happens may be compared to what occurs in a change-office outside the gates of a great exhibition. There are thousands of little transactions in the course of the day, but the cash at closing time should be precisely the same as it was when the office opened. But, compared with Nature, there is this marked difference, that whereas the change-office began with much silver and ended with many notes, a more condensed and portable form of energy, the tendency in Nature is towards dissipation or degradation of energy. The clocks run down.

To understand the Conservation of Energy aright, we must keep in mind the correlated fact of the transformation of energies. A certain amount of mechanical power, such as that of Niagara Falls, is changed into electricity; and this is changed again, often at a great distance, into light and heat. The different forms of radiant energy are all "convertible," to use Faraday's word—magnetism

into electricity, electricity into light, and so on. It was a great triumph when Clerk-Maxwell demonstrated the electro-magnetic nature of light, though it may be that this is not the last word on the subject. In any case, the transformability of energies is one of the great unifying ideas of science; and though the subject is one of great difficulty, it may be noted here that in the opinion of many competent judges Einstein has shown that gravitational energy, and the movements of the tornado, and the explosive expansion of heated water and gases, can all be brought into line with the already unified radiant energies of electricity, magnetism, and light. The two sets of energies are at last seen to be parts of a greater whole, and all the powers in the world—*except mind*—are one. If this great generalization is a sound one, it is a unifying principle of the first magnitude, worthy to be placed alongside of Newton's Law of Gravitation, which bound the falling apple to the distant star.

Without pressing the complete unification of energies suggested by Einstein, we may illustrate our general point by noticing the unification implied even in the term "electro-magnetic waves." These include the visible rays of light, which may be compared to *one octave*; but on one side of the light we see, and with shorter wavelengths, there are the ultra-violet rays which ants can perceive, and are curiously tonic to our skin, and also a great stretch of X-rays and Gamma rays, some of which are used in radiology. On the other side of the light we see, and with much longer wavelengths, there are the infra-red rays that radiate from hot bodies, including the sun; and then comes a great stretch of Hertzian waves and the wireless waves. All these are in the same series of electro-magnetic waves, with the same velocity of 186,300 miles per second. But what a gamut from the vigorous Gamma rays, emitted when the atom of a radio-active substance disintegrates, to the tremendous radiations of broadcasting—a gamut of 62 octaves altogether, *of which we see but one!*

It has been pointed out by several great physicists that the principle of the conservation of energy is clearly implied in Newton's scholium to his third law of motion; but the experimental proof was furnished by Rumford and Davy, Colding and Joule; and we must not forget Mayer and Helmholtz. If we wish to think of one name in particular in this connexion, it should certainly be Joule. As Sir Henry Roscoe put it: "In his determination of the mechanical

equivalent of heat, James Prescott Joule gave to the world of science the results of experiments which placed beyond doubt or cavil the greatest and most far-reaching scientific principle of modern times, namely, that of the conservation of energy."

6. THE ATOMIC VIEW OF NATURE

To John Dalton we owe the first clear statement of the fundamental fact regarding chemical combination: that substances, both simple and compound, always combine in *definite proportions* of their weights. When there is a chemical reaction, so that new bodies are formed, the masses of the old and the new are always in fixed proportions. This *fact* led on to *the atomic view of matter*; and this changed chemistry from a qualitative to a quantitative science. Dalton's view was that matter has a grained structure, being made up of indivisible atoms—the smallest particles of a substance that exhibit its essential properties. Any simple substance or element consists of atoms of the same nature, form, and weight (or mass); and the atoms of different substances have different weights. When a chemical combination takes place between several elements, their atoms arrange themselves in definite groups which we call molecules. Every molecule of a definite chemical compound contains the same number of atoms arranged in the same way. According to Dalton, in the early years of the nineteenth century, the atom was the last word in the divisibility of matter. A hundred years have passed, and we now know that many an atom has a complex constitution. Dalton compared his atoms to "small shot"; nowadays they are often compared to solar systems! None the less, Dalton was a great *initiator*; he introduced a new unit—the atom—into chemical description, a unit that could be weighed in relation to other units.

Let us now take a glimpse of the picture which Dalton's *continuators* have given us—a picture that owes its origin to the discovery of radio-activity. "Thou knowest no man can split an atom" was one of the Quaker chemist's sayings; the word atom means "what cannot be cut." But the phenomena of radio-activity disclosed the fact that an atom may disintegrate and give out particles. In other words, the atom also has a structure, and is very far from being indivisible.

The simplest atom is that of hydrogen, which consists of a

hydrogen-nucleus or proton, bearing a charge of positive electricity, round which there revolves a single electron bearing a charge of negative electricity. All atoms consist of these electrons and protons. An electron is an electric particle or unit of the negative kind of "electricity," and it is generally believed that a hydrogen-nucleus or proton is simply an electric particle or unit of the positive kind. Thus it seems as if matter was swallowed up by electricity; but we do not understand what electricity is, nor the difference between positive and negative, save that each attracts its opposite and repels its own kind. Everyone knows how the rubbed amber attracts a shred of paper; so the positively-charged nucleus of the hydrogen atom attracts the negatively-charged electron. All electrons have the same amount of negative electricity, the smallest amount that can exist.

But our outline picture of the structure of the hydrogen atom—a nucleus of hydrogen, around which an electron revolves, is too simple to be typical of the others. The most complex known atom, that of uranium, consists of 92 electrons revolving in orbits round a core, and this core is again a microcosm, consisting of 238 hydrogen-nuclei in the centre, and outside that 146 inner electrons.

Here again is one of the great unifying ideas of science, that all matter consists of diverse collocations of electrons and protons. There are 92 different elements, less four or five gaps, and it had been recognized by Mendeléeff and others that these were arranged, as regards their properties, in orderly periodic series. Now we know what lies behind these series, the different elements differ from one another in the number and movements of their component units. In a new sense, all the world is one; in a new sense, we can discern William Blake's "world in a grain of sand." Most atoms are like whirling solar systems.

But a larger result still is the discovery that the greatest source of power is intra-atomic. The planetary system of the atom is thrilling and bursting with energy, especially when it is overcrowded as in the case of the radio-active elements. When a substance is burnt, the energy of the outer whirling electrons is transformed into heat. Disturbances in the inner whirling rings of electrons result in the production of X-rays, which have a wavelength 10,000 times shorter than visible light-rays. When electrons on an outer orbit hop abruptly on to an inner, as a man might pass from one moving

circular platform to another, then the liberated energy may take the form of visible light ! If the core or nucleus of the atom begins to disintegrate, then there are the phenomena of radio-activity—a giving off of Alpha rays which consist of helium particles moving with about one-tenth of the velocity of light, of Beta rays which are electrons moving almost as quickly as light, and of Gamma rays which are electro-magnetic waves of the maximum velocity, that of light, namely, 186,300 miles a second. Heat is also given off, and associated with the disintegration of the atomic nucleus is the change from one element to another.

Thus uranium may give rise to protactinium, which produces actinium, which produces lead. Or in other cases, uranium may give rise to ionium, which may give rise to radium. Or, again, radium, by giving off helium, may produce lead. And thorium may do the same. Thus we have already mentioned three ways in which lead may arise, from actinium, from radium, and from thorium, and there are other ways ! All these leads are the same in chemical reactions and yet slightly different in internal structure, being what are called " isotopes." It may be noted that while lead seems to be readily " born " and does not die, there does not seem to be at present any process working the other way and producing heavy atoms like those of uranium. We live in a time of the running-down of clocks. One would like to know how they were once wound up, and whether the winding up will ever begin again.

7. THE NEBULAR HYPOTHESIS

According to the philosopher Kant, the two great wonders of human experience are " the starry heavens above and the moral law within "; and it is interesting to remember that he was one of the first (1755) to try to give a firm picture of the way in which our solar system might have attained its present form from a state of diffuse material particles. Unaware of Kant's bold suggestion, the French mathematician and astronomer Laplace published in 1796 certain suggestions of a cosmogony, which became widely known as the Nebular Hypothesis. Laplace himself regarded them as merely tentative.

As the provisional beginning of our solar system Laplace pictured a vast, very hot gaseous mass, rotating as a whole like a solid

body, and filling more than the space now occupied by the planets in their orbits around the sun. From this rotating, cooling, and therefore contracting nebula he supposed that rings or zones were successively separated off, which condensed into the planets and the earth.

Though Laplace's form of the Nebular Hypothesis has not survived, we include it here as one of the foundations. For Laplace was a great *initiator*, and although his particular suggestion has faded, it has been succeeded by others which, in some form or other, have come to stay. There is general agreement among astronomers that some kind of "nebular hypothesis" must be accepted.

In our 1924 Terry Lectures at Yale University ("Concerning Evolution," 1925), we have summed up the matter in the following sentences.

The characteristic nebula in the heavens to-day is the *spiral nebula*, consisting of a central nucleus and spirally-twisted ejected arms, emerging symmetrically from opposite ends. Condensations on these arms might form stars or systems of stars, but the separated stars would not, it seems, proceed to repeat the process by forming planets. According to the experts a solar system like ours could *not* arise in this way.

Thus has arisen the remarkable *tidal hypothesis* of Jeans and of Chamberlin, that the sun, originating perhaps from the condensation of a great gaseous nebula, or as a knot on one of the spiral arms referred to, might become subject to intense tidal forces because of the near approach of a passing star. A great jet or secondary nebula drawn out beyond possibility of recall might break into fragments and condense into knots which became the planets and our earth. It may be noted that some of the sun's "red-flame prominences," observed during solar eclipses to-day, sometimes rise to heights of nearly 300,000 miles.

Residual materials of the broken twisted arms might be subsequently gathered into the knots, along with more dust-like particles called "planetesimals," which are regarded by Chamberlin as having made important contributions to the young and growing earth. The drawback to such a brief statement of a great theory is that it cannot suggest the carefulness with which it has been thought out, or the mathematical skill which has been devoted to its elaboration. Details apart, there is general agreement that the solar system, and

others more or less like it, must have had a nebular origin; and there are many nebulae in the heavens to-day which look as if they were worlds in the making.

We cannot leave this august subject without submitting three considerations. The first is the impression one gets of man's intellectual masterfulness. As Tennyson said, Science reaches forth its arm, and charms her secret from the latest moon, and yet the whole possibility of science, as Poincaré points out, seems to depend on man's being able to see the stars in heavens not constantly overclouded. How else could we have arrived at our vision of the order of Nature?

Secondly, it is a notable fact that when the astronomer reaches back and back, he does not seem to come any nearer a beginning. He can observe to-day distant bodies whose light left them 10,000 years ago, but they do not disclose a *different* world. Theoretically, he can work back to a vast nebula from which stars and systems of stars might arise, but this product of his thought is just like the nebulae that are at present to be studied in the sky. And in regard to what preceded the nebulae he has no information. The astronomer seems confronted with an Eternal Now. And even when there is good reason to believe that a giant star sinks with changing colour into a cooling dwarf, it is quite possible that before this darkening body dies, it may explode into dust and vapour, so that the cycle, from nebula to nebula, is completed.

Thirdly, it is always a difficult thought that when we scientifically trace back our earth to a gaseous nebula, we have probably to include along with the earth the simple primitive ancestors of all its living inhabitants. Yet, leaving Man aside, we must admit that many animals give abundant evidence of having "minds." All clear thinking, however, points to the conclusion that mind could not arise from matter, or from anything different from mind. Thus we land in a dilemma. This may be due to something wrong with our postulates, such as the origin of the living from the dust of the earth. But perhaps another way out may be some form of Panpsychism, such as certain reputable philosophers allow. If we hold to the Aristotelian idea that there is nothing in the end which was not also present in kind in the beginning, we must conclude that there was more in the primitive nebula than would have met the eye! Science pictures a primal nebula of whirling atoms and radiations, but no more, because these suffice for the immediate purpose

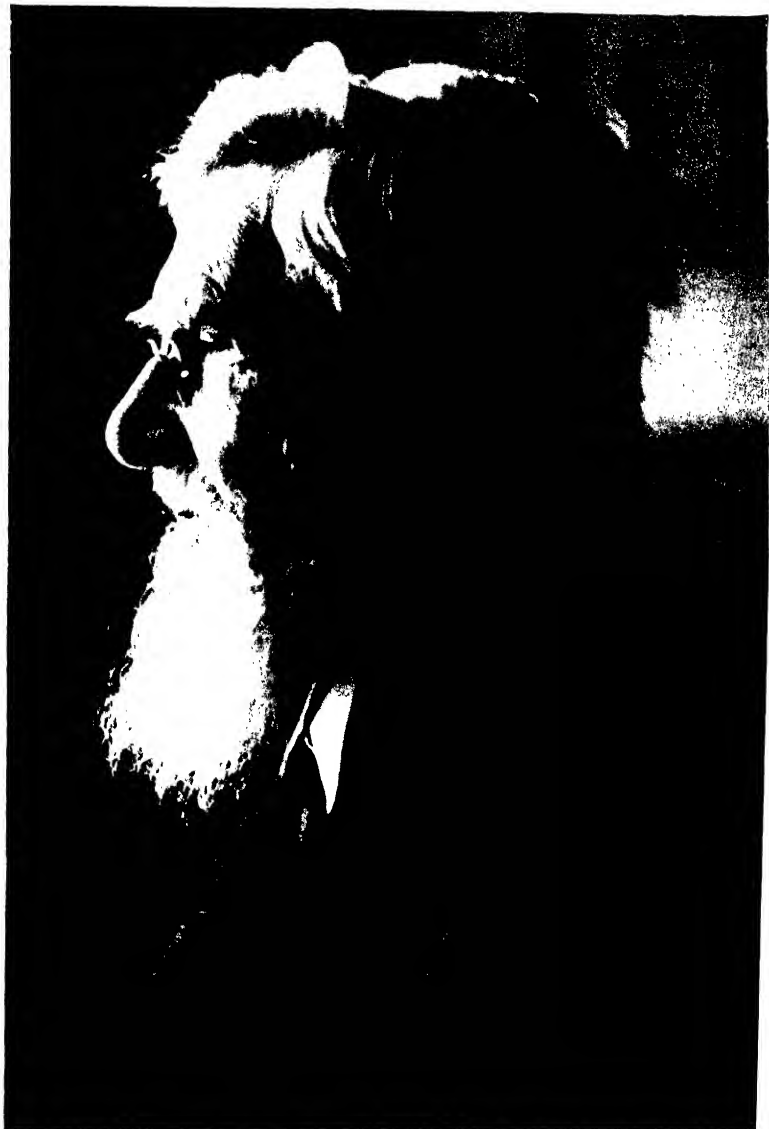
of reconstructing our world, *life and mind ignored*. But since these emergences of the genesis cannot be ignored, we must predicate in the nebula something corresponding to implicit mind, just as there must be something of the sort in the animal egg-cell; and thus after a long circuit we come back, *beyond science*, to the belief expressed in the first verse of the Gospel of St. John: In the Beginning was Mind.

8. THE MAKING OF THE EARTH

Another of the foundation-stones of modern science is now so familiar that we scarcely give it a thought. It is the conception of the present-day earth as the outcome of a long series of changes. To James Hutton, whose "Theory of the Earth" was outlined in 1785, we owe the idea of throwing the light of the present upon the past; that is to say, utilizing, as far as they will go, all the kinds of change that are observable to-day. Hutton had, dimly at least, in his mind the idea of a *developing* earth, in the making of which "little causes, long continuing," have counted for much. No doubt, like Lyell after him, he overdid his "uniformitarianism," as it was called, in insisting that there have never been factors other than those observable to-day, but within bounds it was a sound method, and there is a fine ring in his sentence: "No powers are to be employed that are not natural to the globe, no action to be admitted of except those of which we know the principle, and no extraordinary events to be alleged to explain a common occurrence."

To a noble succession of geologists, beginning with William Smith, we owe the fundamental idea of a "geological succession" of strata—the idea of the earth's crust as a great history book whose pages are the various layers in which particular processes are recorded so that he who digs may read. And the fossils, whose meaning was so long hidden, were at last seen to be, on these same pages, the records of the succession and advance of life. "No single discovery," said Sir Archibald Geikie, "has ever had a more momentous and far-reaching influence on the progress of a science than that law of organic succession which Smith established." The escape from the trammels of the extreme uniformitarian view of the earth's genesis, and the working out of an evolutionary description, are distinctively modern steps.

According to the cosmogonists, the earth probably arose as a knot



DR. ALFRED RUSSEL WALLACE.

Photo: Hoppé.



MME. CURIE.



LORD LISTER.

on the arm of a spiral nebula. This knot gradually condensed and cooled and its crust began to solidify. About the time when the earth's solidification was starting, the moon is believed by many to have been separated off from the earth, the disruptive force being found in the tides which the sun evoked on the cooling earth. On Sir George Darwin's theory the earth was so stretched out in the direction of the sun that it had to give birth to the moon or come to grief. According to another less convincing theory, the original nebular knot was double, and the moon is the earth's dwarf twin-sister. These are matters for mathematical experts to discuss, the important point is that the evolutionary method has been extended in the most serious and critical way to all the details of the earth's history.

Soon after the laying of the foundation-stones of geology, it began to be evident that the earth must have an immense antiquity. There are many different ways of estimating the age of the earth, e.g. from the rate at which sedimentary rocks can be formed, or from the time necessary to filch from the rocks all the saltiness of the sea, or from the amount of uranium-lead in certain radio-active minerals. For many years there was a very marked discrepancy between the age that the geologists and the biologists said was absolutely necessary and the number of years that the physicists would grant as possible. Thus, in 1897 Lord Kelvin cut down the allowance to between twenty and forty million years, "and probably much nearer twenty than forty." This was regarded by the geologists and biologists as far too little. It has now been discovered that the calculations made by the physicists were vitiated by their pardonable ignorance of radio-activity as a source of energy; and now the physicists have granted their colleagues all the time they want. In 1921 Lord Rayleigh said: "Radio-active methods of estimation indicate a moderate multiple of 1,000 millions as the possible and probable duration of the earth's crust as suitable for the habitation of living beings." Professor Schuchert, a distinguished American geologist, wrote about the same time: "Since the discovery of radium, all the calculations previously made have been set aside by the new school of physicists, and now geologists are told they can have 1,000,000,000 or more years as the time since the earth attained its present diameter."

The young earth, as we have seen, was probably a whirling

nebular mass, drawing into its gaseous substance a rich catch of meteor-like bodies and planetesimal fragments, and settling down into a molten sphere, great heat being generated by the impact of the contributions that made the earth grow. There is much to suggest that when the earth finished growing it was molten. Then followed long ages of cooling and zoning, establishing the superficial crust, the dense metallic core, and hundreds of miles of heavy rock between.

In Professor L. J. Henderson's "Order of Nature" (Harvard, 1917) there is a luminous account of the succession of events that made the hot earth a possible home for living creatures. The cooling was followed by the establishment of an atmosphere and a circulation of water between earth and air. For physical reasons the surface of the young earth must have shown an abundant presence of carbon, hydrogen, and oxygen in combination, and these, along with nitrogen in the air, are the requisites for the physical basis of life. Carbon-compounds might readily be formed, as Professor Baly's experiments have shown, under the influence of sunlight on water and carbon-dioxide; and these tend to form colloids, which are characteristically necessary for the make-up and continuance of living creatures as we know them. The making of the soil with its maze of capillary spaces and air-ducts was another change that may be philosophically regarded as a "preparation," for it would afford suitable cradles for incipient organisms. *The emergence of living organisms upon the Earth remains quite obscure*, but there is no doubt that the constitution of the inorganic world has been and is in many ways uniquely favourable to the interests of living creatures. When we consider the pre-conditions philosophically or religiously in the light of their outcome, we cannot but say that it looks as if Nature were Nature for a Purpose.

CHAPTER VII

THE SCIENTIFIC METHOD AND THE NEW PHYSICAL UNIVERSE

BY PROF. J. Y. SIMPSON, M.A., D.Sc., F.R.S.E.

The most accurate scientific description must come far short of being anything like a complete account of Reality, but the more thorough application of the scientific method has led to a deeper understanding of an orderly and continuous universe than was apparent a few decades ago.

ONE of the marked characteristics of the New Physical Universe lies in the fact that it is seen to be indeed a Universe, dynamic, orderly and continuous, as contrasted with the Multiverse, static, disconnected and the arena of somewhat arbitrary happenings, upon which men looked out in the middle of last century. The difference has come about as the result of ever-growing refinements in the elaboration of scientific technique and terminology, and a more thorough application of the scientific method. The Universe has not changed so much as have men's views concerning it, and we may well expect that the process of deeper understanding will lead to still further modification in our conceptions, and a consequent closer approximation to the truth. With the increasing collaboration of workers in different branches of science, and the development of what may fairly be called new science, e.g. biochemistry, the old reproach that there are so many sciences because there is no Science, tends to lose whatever degree of accuracy it may have possessed, and Science proceeds to evolve her own Philosophy.

As ordered, tested, exact and organized knowledge, Science represents a great advance upon the mental stock-in-trade of the man in the street. For the latter, things are very much what they seem to be, and the relations or connexions that he associates with them are very often their relations or connexion with himself.

Science, on the other hand, is severely impersonal. She wants to find out the real nature of, and the relations between, things. The slow accumulation of data—Charles Darwin collected and pondered over facts for twenty years before he dared to offer to his fellowmen his immortal work on “The Origin of Species” by means of Natural Selection or the Preservation of Favoured Races in the Struggle for Life—the ingeniously devised and repeated experiments of the patient researcher carefully checked by controls and sometimes starting afresh on the basis of months of negative work which had its own indispensable value, the assiduous detailed application of the specialist, are all inspired by the hope that they will eventuate in the discovery of law. The urge towards unity and system, towards a coherent self-consistent understanding of things which will result in their greater availability, is the open secret of theoretical and practical science.

Nevertheless very little reflection is required to appreciate how far short the most accurate scientific description must come of being anything like a complete account of Reality itself. Most scientific knowledge comes to us as the result of observation through the eye, yet the range of ethereal undulations and vibrations which can directly affect that organ is very small compared with the known total range. If we take as extremes such waves as those of the “gamma” rays from radium, analogous to light rays, which measure about one fifty-millionth of a millimetre from crest to crest, and certain electric waves which have been found to measure as much as twelve kilometres from crest to crest, it would mean that the range of waves to which the human eye is sensitive represents about one forty-thousand millionth of the total scale. As a matter of fact the actual fraction is considerably less, as twelve kilometres by no means represents the probable limit of the longer waves. Yet on this insignificant fraction is based our knowledge of the world through sight, and all that conceptual realm of æsthetics to which content is originally given through the eye. The same holds true, in differing measure and conditions, of the sense of hearing.

It is very necessary to remind ourselves from time to time of the limitations of scientific knowledge. In terms of the theory of Relativity it is evident that we do not, and can never know, the size of any object in itself. All that knowledge gives us is its size

in terms of some other object. Especially in face of an uninstructed tendency, which is sometimes in evidence, to take scientific conclusions that are valid in a certain restricted area, and apply them, without warrant, far beyond the field in which they were originally won, it is advisable to be continually on our guard. Science deals very largely with the measurable and statistical aspects of things. But these by no means constitute the whole of Reality, and may be the least significant aspects of particular things or events, while statistics help us very little in predicting with regard to the individual organism. With the use of physico-chemical methods, we can naturally expect to achieve only physico-chemical results, and it does not therefore follow that there is nothing in life save physico-chemical relations. We may give a satisfactory account of a rainbow in terms of physics and chemistry, but in so doing we have not exhausted its significance, especially its emotional appeal to the mind and feelings of man.

Under the teaching of modern physics and chemistry, the seeming steadfast structure of the world has been resolved in a very thorough-going manner. The fiction of the atom exploded with the atom, and in its surrendered fortress the chemist and the physicist have met and recognized in one another the same individual. Ninety-two elements there may still be, of which eighty-seven are actually known, but it is no longer easy to think of them as having existed in discrete perpetuity. Relationship and fundamental similarity of composition are of the order of the day in physical theory. The disruptive radio-active elements, which comprise two at least of the ordinary chemical elements, afford spontaneous evidence of transmutation through many distinct stages of disintegration into simpler elements, while those that are not thus radio-active can at any rate be arranged in very suggestive schemes of increasing atomic mass. It is conceivable that they all represent final products of æonian disintegration and disruption, and certainly the most positive evidence for the moment—that of the radio-active elements—is of devolution rather than of evolution. Yet the probabilities are that what is now complex and in process of disruption was at one stage simpler and gradually built up.

The inquiry has, however, been pushed very much further, until, indeed, there is a very real sense in which to the mind of the modern physicist :

“The cloud-capp'd towers, the gorgeous palaces,
The solemn temples, the great globe itself”

are resolved into energy and electricity, and leave “not a rack behind.” For him the atom consists of a nucleus where substantially all its mass is concentrated, and a number of electrons or units of negative electricity, revolving external to and at a relatively great distance from it. An electron is a minute charge of electricity—it may perhaps be thought of as spherical—and is indeed the smallest known thing in creation. The nucleus in turn is composed of protons or units of positive electricity in close association with electrons, but the number of protons always exceeds the number of electrons in the nucleus. The figure representing the excess of protons over electrons in the nucleus constitutes the atomic number. Thus the figure 92, which is the highest known atomic number—that of uranium—represents the excess of protons over electrons in the nucleus of the uranium atom. The hydrogen atom consists of one proton or monovalent positive hydrogen ion, and one electron, which may be thought of as revolving rapidly round one another. The main difference between proton and electron lies in the magnitude of their respective masses. The helium atom again consists of four protons and two external electrons.

The relation of the external electrons to the nucleus has been compared to that of planets and a central sun. But the sun in these instances must be small, since the nucleus is small compared with the external electrons, while other considerations suggest that the analogy cannot be pressed very far. Arranged in concentric shells or figures, the external electrons, increasing in number, are disposed about the central and ever more complicated nucleus, and in this number and arrangement of external electrons is supposed to lie the secret of the chemically characteristic qualities of the different elements. Increase of complexity shows itself in increasing atomic mass. The granular electrons, which are identical with the so-called “cathode-rays” and the high-speed “beta” particles that were early recognized as being thrown off from the nuclei of radio-active substances, have been found through most elaborate and ingenious experimentation and calculation to have a mass $\frac{1}{1837}$ of that of the hydrogen atom.

The proton we have seen to be the positive hydrogen ion; it is the nucleus of the hydrogen atom, or the hydrogen atom minus

its electron. In this dissatisfied state it goes about, seeking for an electron whose union with it will produce atomic satisfaction and consequent stability. Positive electricity attracts negative electricity, but repels its like. Or to put it in another way, the most fundamental characteristic of the electron is just its power of repelling other electrons and attracting positive ions, that is to say, atoms which for some reason or another have lost one or more of their constituent electrons. The loss of an electron by an atom leaves it with an equivalent positive charge.

In larger groups of four protons and two electrons, these ions constitute the so-called "alpha" particles, shot off in radium disintegration. Union with two more electrons produces internal balance and satisfaction, turning them into staid helium atoms, and showing them to have been indeed helium ions, i.e. the nuclei of helium atoms. Such "alpha" particles, in differing numbers, may be considered as constituting the nucleus of every kind of atom except hydrogen. Additional protons there may be in certain cases, but this increasing yet orderly complexity of nuclear and electronic external structure, constitutes the basis of the Periodic Table of the elements. Chemical affinity, radio-activity and electromagnetism are due to quantitative electronic superfluity or deficiency—to the tendency, one might say, of unsatisfied atoms to form completed self-contained internal systems—and are essentially energetic. The atom is thus a complex system whose mass is related to the nuclear protons, whose chemical behaviour is due to the external planetary electrons, and whose nuclear condition is more stable in some cases than in others. Transmutation results from instability and change in connexion with the nuclear constituents. Indeed mass *is* energy, or rather, the mass of the electron is wholly electro-magnetic; it is merely a factor in the expression of the relationship between energy and speed, increasing at speeds comparable to that of light.

Atoms of different mass but identical chemical character or attribute are known as isotopes. Their proved existence has made impossible the old idea of the homogeneity of chemical elements. The electric current turns out to be a flow of electrons along the conductor, while magnetic phenomena are a result of the interactions of parallel streams of electrons. An electric charge under any conditions has definite granular structure, and consists

of a definite number of similar electrons which in static phenomena are distributed over the surface of the charged body. In short, in terms of a more mature physics, the bottom has been knocked out of the older materialism, and we are left with invisible, all-pervasive, infinite energy and an invisible, impalpable vehicle of expression. As we were told long ago, "what is seen hath not been made out of things which do appear," but is, in Sir W. F. Barrett's words, "the direct continuous offspring of an unseen universe and an indwelling yet transcendent Power."

But further, light, ultra-violet rays, X-rays and "gamma" rays are all radiations of the same character though differing in frequency of the vibrations from which they originate. The oscillators, i.e. the discrete electrons, emit energy only in definite quantities whose values depend on the frequencies of their oscillations. Emission, that is to say, is in quanta; of the method of original absorption of energy by the electron, nothing is known, yet it seems to be going on continuously, resulting in storage until release is effected by some disturbance of the electronic oscillation. The emission of energy is held to be connected with the change of an electron from a less to a more stable orbit. Interaction with other atomic systems in high motion, or other causes, may result in a planetary electron being dislodged so as to move in a less stable orbit. When it returns to a stable position again, energy is radiated with the velocity of light. Light in fact is radiant energy. Energy is transferred in discrete bundles, the size of which is dependent only on the frequencies of the atomic and electronic oscillations which are concerned. The behaviour of all the different forms of energy discloses a thorough-going Order of Nature that extends throughout the recurrences of the Periodic Table even to the granular structure of energy and electricity. So definite is this impression that various atomic models have been proposed which, however they differ in other respects—in the Bohr model, for example, some of the electrons are in rotation, while in that devised by Lewis and developed by Langmuir, the electrons effective in valency relations are relatively fixed—agree in their representation of this inherent structural order.

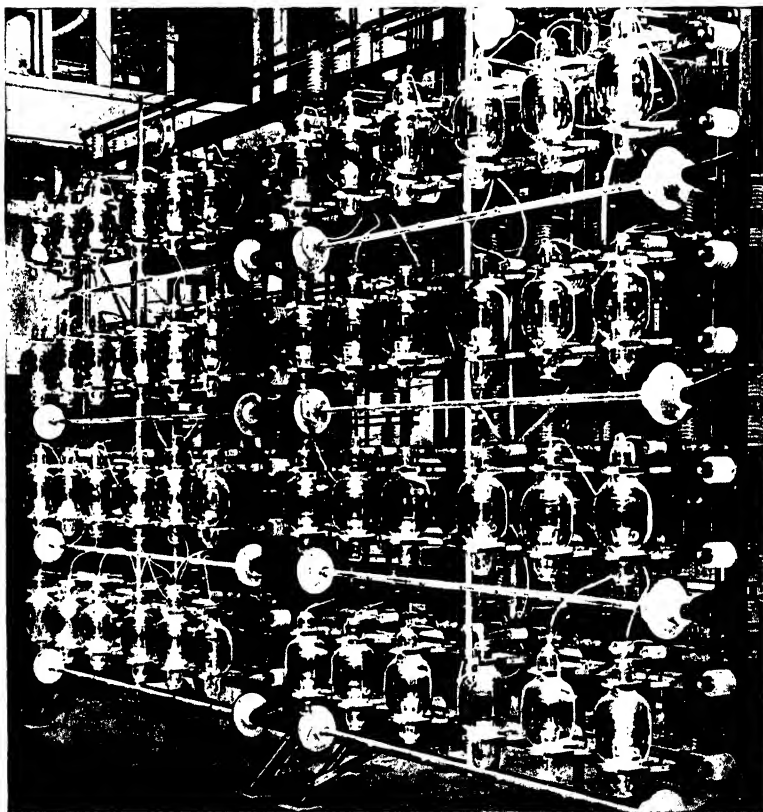
Reference has been made to the evidence of transmutation supplied by the spontaneous disintegration of the two heaviest elements, uranium and thorium, where lead is the final product of



AN X-RAY PHOTOGRAPH OF THE HAND, AND W. K. RONTGEN, DISCOVERER OF THE X-RAYS.



THE FIRST WIRELESS SET, MADE BY DAVID HUGHES, 1879.



THE TRANSMITTING VALVES OF THE MARCONI STATION AT CARNARVON.

a series of stages, all of them radio-active, in which helium and electrons are given off, and radium itself with several intermediate stages are all produced as the result of a series of processes unaffected by any laboratory devices. While the explosion is sudden so far as the individual atom is concerned, the process is slow in relation to the mass of the radio-active substance, various atoms breaking up at different times. The whole process is tolerably clear and quite definite, even if it be a fair question as to how far the term transmutation is strictly applicable when the sequence is one of persistent loss of original constituents. Such transmutation has also been effected as the result of ingenious experiments devised by Sir Ernest Rutherford and his associates, whereby the "alpha" particles discharged from radio-active elements were employed in the bombardment of the atomic nuclei of other elements, and in the rather rare case of direct hits, hydrogen ions or protons were released from the disrupted nucleus. More recently the claim of having achieved the transmutation of mercury into gold has been advanced by German and Japanese researchers. Since the atomic numbers of mercury and gold are 80 and 79 respectively, the relation is close, and it is maintained that the results have been secured without any recourse to the assistance of radio-activity. Theoretically, the transmutation ought to be possible, and the dreams of the old alchemists thus be justified in some degree.

Much the same kind of conclusion is forced upon the mind as the result of study of what in contrast seems the infinitely great. The sidereal universe in which our solar system finds its humble place is known to be at least one hundred thousand times as large as men believed it to be even in the beginning of the century: there is more than one sense in which "the thoughts of men are widened with the process of the suns." It may be pictured as a flattened disc or lens, at least 300,000 light-years in diameter, and some 6,000 in thickness, with the so-called globular star-clusters grouped around and outside it as possibly dependent sub-systems. A light-year, it may be remarked, is an astronomical unit of measurement, equivalent to nearly six million million miles, representing the distance traversed by light travelling for a year at the rate of 186,000 miles a second. The great mass of the 1,500 million stars—a very approximate estimate—is found in the Milky Way which

constitutes the periphery of the disc on which we look out, as it were, from a somewhat central position within.

The difficulty in estimation lies in part in the fact that owing to the enormous range of luminosity amongst the stars those that are faint in this respect have much less chance of being discovered, and it is considered probable that at least half of them are quite dark. Luminosity apparently has a direct relation to density rather than to temperature. Low density goes with high luminosity, whilst the stars with low luminosity have a density comparable rather to that of the earth. Further consideration of all the facts led Professor H. N. Russell to the view that stellar evolution proceeds from low density and high luminosity to high density and low luminosity as the result of continuous radiation of energy. As to the source of this energy there is still very much debate, and no adequate proximate solution has yet met with general acceptance. J. H. Jeans has suggested that as a star gets older, its mass and luminosity decrease together. This implies that wastage of mass is the determining cause in stellar evolution, and that from knowledge of a star's mass we can estimate its relative position in the stellar cycle of events. The rate of this evolution is by no means uniform, being much more rapid in the earlier phases of a star's existence. According to Jeans, "the total stretch of road from the most massive to the least massive of known stars is one of about 200 million million years, by far the greater part being occupied by stars less massive and less luminous than our sun. This may explain why stars less luminous than our sun are so very common in the sky, while stars more luminous than Sirius are exceedingly rare."

In the endeavour to push back to the earliest phases of this evolutionary process, both along theoretical lines and in terms of what is actually disclosed through observation of the heavens, astronomers are fairly satisfied that the spiral nebula is typical of the stage which they desire to investigate. Rotating about its axis with increasing speed as its mass undergoes shrinkage, such a gaseous nebula can be shown to be liable to pass through a definite cycle of development on theoretical grounds, which is matched by actual conditions observable in the stellar system itself. Thus a state is reached where particles lying along the equator of the rapidly rotating mass, and subject to gravitational and centrifugal forces which just about balance, will finally be left suspended and

detached as the result of the continual shrinkage of the central body. As a matter of fact, however, owing to the pull and play of neighbouring bodies, this extrusion of matter more commonly takes place in the form of long tidal filaments at two opposite points of the equator, whose constituents thereafter condense into the substance of what become great numbers of stars or a few accompanying planets according to the scale of the nebula, much indeed as a jet of water breaks up into drops.

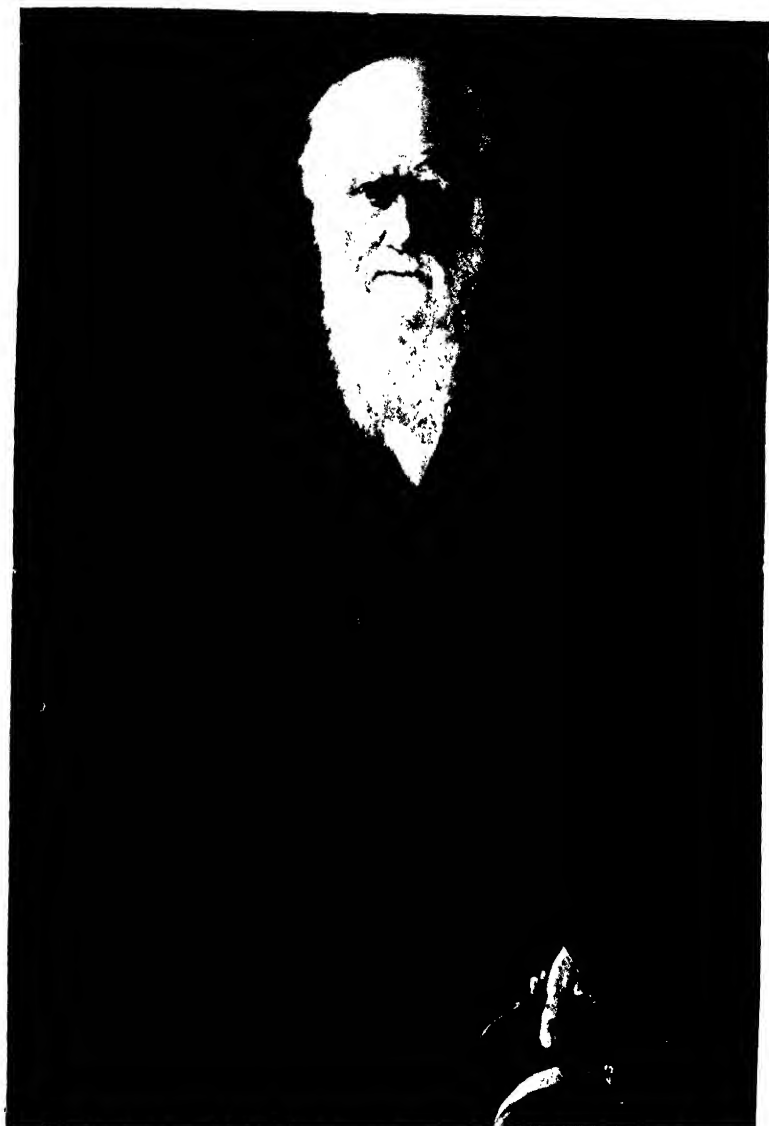
With certain differences, mainly of time—for nebular development is æonian—such a tidal theory is held by many astronomers to offer the most satisfactory solution of the problem of the origin of our solar system. At an early stage in the history of our sun, when it was of much greater size and less density, some other star swept near enough to raise such tidal excrescences, which broke away and condensed into the characteristic planetary system with which we are most familiar: further pulls from the sun or other bodies would cause still further disruption of the planets and formation of their satellites. Such a process of discharge, however, would be rapid compared with the analogous processes of development in the filaments of a nebula.

It would be a mistake, however, to suppose that such disruptive episodes are part of the normal history of every great star, nor is it possible to state what degree of uniqueness would pertain to the history of our solar system were the foregoing résumé proved to be an exact account of its origin. The ascription of uniqueness may be due to imperfect understanding or incomplete knowledge which nevertheless to-day, in astronomy at any rate, is more than sufficient to fill the mind with wonder and awe. For at every stage of our rapidly expanding astronomical knowledge, it is with a system, or rather a system of systems, that we find we have to do. Everywhere the impression left is of infinite and eternal energy, of unity and of order. The universe is a unity in the sense that throughout it we find the same elements. It is the same universe because it is composed of the same matter. Yet is there infinite variety, for of the stars which have been examined spectroscopically, no two have identically the same physical constitution; verily, "one star differeth from another star in glory." We receive, further, impressions not merely of unity and of variety in unity, but also of a definite direction of evolution, beginning, as we have seen, with

nebulae of extremest tenuity, and ending with stars as dense as iron. The astronomer moves continually in a region of ultimate forces—Infinite, Immeasurable Power or Energy, in virtue of which primitive nebulae or the primitive nebula are invested with an "amount of rotation," and something that looks like a directive, if not a selective, factor in the age-long process.

When the scale is brought back to that of our own planet, and we are dealing with things not immensely magnified as in the study of physics or telescopically remote as in astronomy, we find the same conclusions once again as it were waiting for acceptance. The earth, formed in some such way as has been outlined in connexion with the evolution of the solar system, probably reached a solid condition, following on a liquid phase, within a further cycle of thousands of years—that is to say comparatively soon. It has been suggested that the moon was formed during the liquid phase, being a rather large fragment of the earth, detached under the tidal pull of the sun. In these earliest days of its separate existence, the moon was probably much closer to the earth than at present. As soon as a solid crust was formed on the earth, the rate of cooling of the interior was necessarily subjected to very definite retardation. Torrential rains would soon fill up the basins of the ocean, and the era of age-long denudation began. Increasing stresses due to the continual contraction of the cooling interior could only be relieved by movements that showed themselves on the surface. The puckering up of ridges at great intervals of time and space, which constituted the well-known mountain ranges of any era, is the most marked result of this continuance of planetary vitality. At least six major periods of readjustment have been distinguished by the geologists.

How closely all the foregoing lines of investigation are connected is brought out when it is recognized that radio-activity is more and more used as a basis in the attempt to elucidate the delicate question of the age of the earth. Knowing the rate of break-up of uranium, the researcher can calculate, from the amount of lead present in any uranium-bearing mineral, how much uranium was originally present, and from comparison with the present amounts of uranium in the mineral, what fraction of the original uranium has broken up. Calculation starting from such considerations indicate an age not less than 1,500 million years. There are other methods of



CHARLES DARWIN.

possible abode of life as we know it, so far as the elements of the periodic system are concerned." The earth, that is to say, has proved itself peculiarly fitted for life, although there is no reason to suppose that it alone amongst the heavenly bodies has significance in this respect.

Again, in graduated stages of electron, atom, molecule, inorganic colloid and organic colloid, it is possible to trace a progressively complex succession where the differentia between the last two terms is energetic. But life in its first glimmerings may well have been no more than molecular in structure. Certainly it is no mere function of physico-chemical complexity, and the point of view which sees in structure the primary determinant of life, is slowly giving way before views that represent recognition of the fundamental part played by tendency, the capacity for regulation, and the persistent influence of the past in modifying response, and seek for the true understanding of life along psycho-energetic rather than purely physico-chemical lines. Yet this does not mean that the latter aspect is not real and of the greatest importance. The resulting linkage of the inorganic and organic gives continuity, and an added impressiveness, to the whole process. There is evidently a certain main direction in it all which comes out the more clearly the larger the scale upon which the evolutionary life movement is studied. It becomes increasingly significant, and for the biologist the denial of progress in the sense of the increase or intensifying of certain properties and capacities of living things, both in the general averages and particularly on the higher levels, is not possible. And the progress is not confined to the organic. For it can be shown that organic advance has had some relation to physical geography, and one of the great stimuli to organic progress has just been the actual process of environmental physical diversification. The secular changes—some of them doubtless more rapid than others—resulting in movements of uplift on the earth's surface, on a major or minor scale, which are followed by immense periods of erosion, are burdened with significance in the minds of some geologists. So Professor Charles Schuchert of Yale University speaks of the earth as having just passed through one of these major readjustments, and "accordingly we see all of the continents standing far higher above sea-level than has been the rule throughout geologic time, and in many of them rise majestic ranges of mountains. A grander,

more diversified, and more beautiful geography than the present one the earth has never had; this statement is made advisedly and with the knowledge that our planet has undergone at least six of these major readjustments of its mass." In a similar strain Professor W. W. Watts, in his Presidential Address to the Geological Section of the British Association in 1924, saw in the story of the physical evolution of the earth "a wondrous scheme which, unrolling through the ages, without haste, without rest, has prepared the world for man's dominion and made him fit and able to occupy it." It becomes clear that in dealing with the relations of the organic and inorganic, we are not treating so much of two systems as of one, undergoing purposive change.

CHAPTER VIII

EVOLUTION IN ITS RELATION TO CHRISTIANITY

BY PROF. J. ARTHUR THOMSON, M.A., LL.D.

The evidence indicates that the main trend of evolution has been progressive, and that the idea lends itself to a deeply religious interpretation. It is the duty of theology to accept the carefully scrutinized results of science and to illuminate them with meaning.

THE general idea of evolution is of old standing. In his admirable sketch "From the Greeks to Darwin" (Columbia University Biological Series, 1894), Professor H. F. Osborn has shown that several of the ancient philosophers looked upon Nature as a gradual development, and as still in process of change. Thus Empedocles was in some measure an evolutionist, picturing a gradual movement towards perfection; but he had no hold of the idea that one stage in the process leads naturally on to its successor. There was more of this idea in Aristotle, as in the sentence: "Nature produces those things which, being continually moved by a certain principle contained in themselves, arrive at a certain end." There were no more than hints of evolutionary outlook (in Lucretius and Bruno, for instance) in the long interval between Aristotle and Bacon, but the idea re-appeared in full strength among the philosophical thinkers at the end of the sixteenth century and beginning of the seventeenth. One must remember that there had been a return to the study of embryonic development, which Aristotle began, and this is *bound* to suggest racial evolution. Yet, as Professor Osborn points out, "it is a very striking fact, that the basis of our modern methods of studying the Evolution problem was established not by the early naturalists nor by the speculative writers, but by the Philosophers." He refers to Bacon, Descartes, Leibnitz, Hume, Kant, Lessing, Herder, and Schelling. "They alone were upon the main track of modern thought." Many of them were, of course, scientific investigators of great distinction.

The scientific renaissance brought a wealth of fresh impressions, as well as some freedom from inhibiting tradition; and evolutionary thinking began to take hold of the naturalists. There were lesser lights, no doubt, but the first to give a broad and concrete expression to the evolutionist doctrine of descent was Buffon (1707-1788). Vascillating though he was, he had a vision of "l'enchaînement des êtres," what we might call the affiliation of organisms. Then came the pre-Darwinian pioneers: Erasmus Darwin (1731-1802), Lamarck (1744-1829), Treviranus, Etienne Geoffroy St. Hilaire, Goethe, Robert Chambers, and others, on to Herbert Spencer, who in 1852 gave a very forcible presentment of the arguments for the evolutionist point of view, and applied the evolution idea in detail in his "Principles of Psychology" which was published in 1855, four years before Darwin's "Origin of Species." The history shows that there were many evolutionists before Darwin, though he knew very little about them till after he had been for many years at work. Samuel Butler was historically unjust when he wrote "Buffon planted, Erasmus Darwin and Lamarck watered, but it was Mr. Darwin who said 'That fruit is ripe,' and shook it into his lap." The history also shows us that many and diverse factors contributed to making the idea of Evolution in Animate Nature acceptable. We must take account, for instance, of the attempts that Kant and Laplace made to disclose the origin of our solar system, Lyell's interpretation of the present-day earth in terms of its past, the growth of embryology, and the beginning of a scientific view of human history. A great idea has usually a complicated pedigree, and it cannot be understood apart from contemporary changes in many other fields.

I

The term evolution is too wide to be of great service without some qualifying adjective. For it is simply a convenient word to denote a continuous process of Becoming, in which each stage is the natural outcome of the antecedent stages. Everywhere in the world, whether in the starry heavens above, or in the earth beneath our feet, in our domesticated animals or our cultivated plants, in the faunas and floras of Wild Nature, or in human societies themselves, we read the sequence: Becoming, Being, and Having Been. And this is Evolution.

By common consent among naturalists the word *development* is restricted, as far as possible without pedantry, to the Becoming or life-history of the *individual*. The butterfly from the chrysalis, the chrysalis from the caterpillar, the caterpillar from the egg—that is development. There is a continuous series of stages, for even in metamorphosis there is no discontinuity; and in the beautiful orderliness of the process, “first the blade, then the ear, then the full corn in the ear,” each stage completely conditions its successor, though not in any merely additive or mechanical way. For that is not Life’s way. Development in the biological sense is the actualization or realization of what lay latent or implicit in the germ. It is the embodiment or expression of the previously invisible, the “minting and coining of the chick out of the egg,” as Harvey said. The hereditary legacy is cashed and then traded with; out of the apparently simple comes the obviously complex. This is *development*, and the word should be kept for the *individual’s Becoming*.

But Organic Evolution is a *racial* change, and refers to pedigrees—to the origin of birds from a reptile stock, or the origin of amphibians from fishes, or the origin of flowering from flowerless plants. Considering not the individual, which develops from an egg-cell, but all the individuals that constitute a species, the evolutionist asks, how did this kind or type of creature arise? Whence came the modern elephant with his trunk and tusks? The answer is: From an old-fashioned creature (*Mœritherium*) that lived millions of years ago amid the luxuriant Eocene vegetation of North Africa.

Organic Evolution may be defined as a process of racial change in a definite direction, in the course of which distinctively new types emerge and persist, either in place of or alongside of those from which they arose, all apparently occurring by continuous processes of change which admit of scientific description, or give promise of so doing. Of course scientific *description*—all that science ever gives—does not in any way preclude philosophical or religious *interpretation*. We see then, that the general idea of Organic Evolution is a *modal* formulation of the way in which living creatures have come to be as they are. It means that the kinds or species of wild plants and animals that we know to-day have arisen, in a manner as natural as growing and multiplying, from previous kinds or species of plants and animals, on the whole somewhat simpler or more generalized, and these from others still simpler and more generalized,

except, of course, in cases like parasites, where the descent has been retrogressive.

In this way the palæontologists trace back the modern horse, stepping proudly on one digit in each foot, to the little Eohippus, not more than eleven inches high, with four toes in front and three behind. Even more primitive than Eohippus was the "coney-like creature" Hyracotherium which grazed over a million years ago in the Eocene meadows of Wyoming and England alike. How eloquent is the statement Dr. Matthew makes in regard to this ancestral type: "Commencing with the Hyracotherium, twelve stages have been recognized from as many successive formations, showing the gradual evolution of the race into its modern form; and each stage is characteristic of its particular geological horizon. Besides the main line of descent which led to the modern horses and zebras, there were several collateral branches which have left no descendants." Organic Evolution means that in Animate Nature the present is the child of the past and the parent of the future.

But if this is Organic Evolution what other kinds of evolution can there be? Well, it seems as if we needed a special term like "history" or "progress" for the evolution of human societies. For man as organism the term Organic Evolution may pass, but is there not a risk of serious fallacy when we apply the same term to the kingdom of man? When we think of it, there are immense differences involved in man's awareness of his own history, in his occasionally very vigorous attempts to control his own future, in his partial substitution of rational selection, and not always rational social selection, for "Natural Selection," or Nature's sifting methods. Then there is the fact that since the disappearance of Neanderthal Man, human evolution has been concerned with one species. How large is the difference implied in the fact that social institutions, products, and traditions, serve to enregister and transmit a *social heritage* which is only second in importance to the *natural inheritance* which has its vehicle in the germ-cells. We are not forgetting that the idea of Organic Evolution arose in part as a projection of the concept of human history upon Nature, but the differences are so great that the use of the same word leads to fallacy. To designate the process of social evolution we might use the word "history," but it is probably too general; or the word "progress," but social evolution is unfortunately in many cases

temporarily retrogressive. We suggest that the use of an adjective will tend to lessen confusion of thought; therefore let us speak of *Organic Evolution* and *Social Evolution*.

But the word evolution is also applied to the domain of non-living things, far beyond the realm of organisms and the kingdom of man. Thus we hear of the evolution of scenery, the evolution of climate, the evolution of the chemical elements, and the evolution of the solar system. This, again, seems regrettable and fallacious, for it is applying the same term to processes of Becoming which are quite different. To consider stellar evolution for a moment, it is assuredly very different from organic evolution, which implies a sequence of generations, the emergence of the distinctively new, and endless sifting and winnowing. In a succession of stellar stages, it is *the same material throughout*, whether it be a diffuse nebula or a giant star, a dwindling dwarf, or one too faint to be seen !

II

If it be granted that it is reasonable to try to give a scientific account of how living creatures have come to be as they are, then the only scientific theory in the field is that they have arisen in a way comparable to that known to have occurred in the origin of domesticated pigeons or poultry, dogs or horses, or of cultivated wheats and potatoes, roses and chrysanthemums. The only scientific theory in the field is that the animals and plants in Wild Nature are the gradual outcome of transformations continued throughout long ages. What the factors may have been that operated in the evolution is another question which naturalists cannot at present answer with any approach to unanimity, let alone completeness. Yet all competent naturalists are now agreed in regard to the *fact* of Organic Evolution, dispute as they may and must over the *factors*.

Whence this unanimity ? Because no one can think of any other scientific way of looking at the facts of the case. It is idle to suppose with Lucretius that spontaneous generation on a large scale took place repeatedly in an orderly sequence. It is impossible to take seriously Milton's picture of the lion pawing his way out of the earth. The rock record shows clearly that things have not always been as they are; that there has been an emergence of nobler and finer forms of life as age succeeded age; that distinctive types did not

appear "full-fledged," but as the outcome of a long series of graduations. And the rock record cannot lie.

But if some one says: We abide by much better guidance than Lucretius or Milton, we abide by the Holy Scriptures; then many an evolutionist would answer, So do we. For the idea of Creation, the Divine Institution of the Order of Nature, is a *religious* idea, throwing light on the significance or purpose of the long process which science tries to describe. The detailed form of the fine religious picture in the Book of Genesis is unimportant compared with the truth it expresses that the Power and Will of God is behind all Becoming. Evolution is a matter-of-fact, empirical, scientific concept. It is a way of describing proximate origins in terms of measurable factors. But Creation is a transcendental, mystical, religious or theological concept. It is a way of interpreting origins in terms which belong to a "universe of discourse" beyond ordinary sense-experience. Stating the contrast more generally, Science aims at describing and formulating events in terms of the Lowest Common Denominators available at the time, such as electrons, protons, protoplasm, and—we shall not omit—"mind." Religion seeks to interpret Nature and History and Man's place in both, in terms of the Greatest Common Measure—which for many thoughtful inquirers, including many evolutionists, is God. Therefore, though there may be differences in form and detail, there should not be any deep opposition between scientific conclusions and religious convictions. They speak different languages; they are differently constituted tendrils of the restless Spirit of Man; they cannot be radically antithetic; they should be strongly supplementary. The question cannot be Evolution *or* Creation; the aim of our clear thinking should be Evolution *and* Creation.

III

The general doctrine of Organic Evolution is not an induction in the ordinary sense—a conclusion emerging from the summing up of a multitude of facts. It was a deduction, and it has found illustration in all the facts to which it has been applied. It is a master-key which opens all the locks into which it can be inserted. No facts are known that are in any way contradictory to this modal theory of Becoming. Yet it cannot be demonstrated like the Law of Gravitation, nor experimentally verified in the same thorough-going way

as is possible with the doctrine of the Conservation of Energy. One obvious reason is that while the process of Evolution is still going on, and can be observed, a great part of it is in the past. In the heavens to-day we can see processes going on that are analogous to those that are believed to have occurred when a vast nebulous mass gave rise to our Sun and its planets; we can get in the short span of human observation no more than glimpses of the Organic Evolution that continues upon the earth. We can study present-day variation and heredity, present-day selection and isolation, but there must always be some hesitation in saying that it was by such and such factors that Birds and Mammals emerged from Reptilian ancestors, birds in one direction and mammals in another. There may have been factors at work long ago that elude us to-day; we cannot be quite certain, especially since our analysis of the factors at work in present-day Organic Evolution is confessedly incomplete. But what may be said is that Biology cannot think of any other mode of origin than that summed up in the term Organic Evolution; and this view is corroborated by every biological fact that we know enough about.

What is the nature of the corroborations or illustrations that are usually referred to as the "evidences of evolution"?

(A) Living creatures are often very variable from generation to generation. Even in the short span of a human lifetime it is possible to observe transformations in process. What differences there often are among the members of a family. The offspring of a brood differ from one another and from their parents, and these inborn variations form the raw materials of possible evolution. Apart from modifications hammered on by peculiarities in surroundings and diet, there is a fountain of organic change within the organism, most of all within the germ-cells which develop into organisms. In many cases there are not only small fluctuations, a little more of this and a little less of that, but distinctively new departures or mutations, which look like sudden changes in organic equilibrium. These are very familiar, for instance, in the Evening Primrose (*Oenothera lamarckiana*), which produced in a short time numerous mutants as different from one another as many wild species. The fruit-fly (*Drosophila ampelophila*) is another good example of an organism at present rapidly mutating. These two cases are but outstanding instances of the variability which is characteristic of life.

(B) There are towards half a million different kinds of living animals, about 400,000 of them being insects ! This multitude of forms or species, each with an individuality of its own, itself and no other, can be classified in an orderly way, and many related kinds can be arranged along lines of hypothetical pedigree. There are sometimes connecting links binding different types together; thus, the very old-fashioned Claw-bearers or Onychophora, such as *Peripatus*, have some worm characters and some insect characters. Among certain mammals it has been shown that blood-relationship can be practically proved by transfusing blood, for the mingling is harmonious in proportion to the closeness of anatomical resemblance. Thus the blood of a rabbit will mingle harmoniously with that of a hare, but not with that of a dog.

When we compare the fore-limb of a frog, a turtle, a bird, a horse, a whale, a bat, and so on, they are superficially extremely unlike, yet in their fundamental bones and muscles, blood-vessels and nerves, as also in their early embryonic development, they are very much the same. These "homologies" or fundamental sameness of structure and development point to blood-relationship. What but an evolutionary interpretation can be given of the frequent occurrence of vestigial structures, like the buried and useless hind-limbs of whales, or the two sets of teeth in whalebone whales which never cut the gum? Then there is what we may call Nature's way of making a new thing out of something very old; thus the elephant's trunk is simply an exaggerated nose with a piece of upper lip added on.

(C) It is an eloquent fact that there has been a gradual advancement of life throughout the ages. For many millions of years, as the rock-record plainly shows, there were only backboneless animals upon the earth. At last fishes appeared in the Silurian period, and they were for a long time the highest living creatures. In the time of the Old Red Sandstone, however, the first Amphibians appeared, and they had their Golden Age when the Coal Measures were being laid down. Without haste but without rest the process of evolution continued, and the Permian period saw the first Reptiles. Later on there emerged Birds and Mammals. The rock-record discloses a sublime spectacle of the ascent of life. For though there have been blind alleys and retrogressions and strange disappearances of master-pieces, like the Flying Dragons or Pterodactyls, the large fact is that

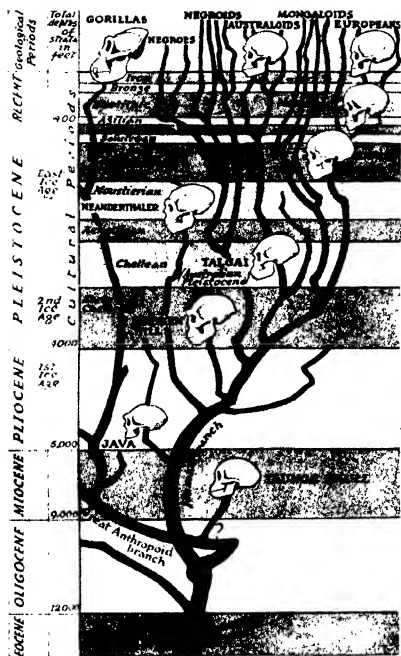
the general trend of animal evolution has been towards the emergence of higher and higher types as age succeeded age, till at the last arose the man.

What but an evolutionary interpretation can be given of the *palæontological series* such as that of elephants, horses, crocodiles and ammonites, where the historical steps certainly look like pedigree writ large? What but an evolutionary interpretation can be given of *Archæopteryx*, the oldest known fossil bird, in which reptilian characters are still conspicuous, such as the teeth in both jaws, the half-made wing, and the long lizard-like tail? Some of the minuter palæontological facts are very striking, such as the gradual series of transitions linking species to species, as for instance in the eight stages between the fossilized freshwater snail called *Paludina neu-mayri*, the oldest of a series, and *Paludina hærnesei*, the youngest. The stages are as gradual as those in the development of an individual organism.

(D) The geographical evidences or corroborations are often very vivid. Thus when Darwin visited the Galápagos Islands on his *Beagle* voyage, he was so impressed by different islands having different species of Giant Tortoise that he says he felt himself "brought near to the very act of creation." Ten different kinds of tortoise on ten adjacent islands, what could it mean but that isolated groups of one original stock had varied in slightly different directions on the various islands, and that isolation (these big tortoises do not swim) had prevented any pooling or blending of the new departures? The islands are practically the tops of the cold volcanoes of a now submerged Galápagos land.

(E) Very impressive is the way in which individual development (ontogeny) often recapitulates in abbreviated form the presumed racial evolution (phylogeny). In a general way it may be said that the individual animal tends to climb up its own genealogical tree. What is one to make of the fact that the embryo reptile, bird, or mammal has always gill-slits on the side of the neck, though they are never used for breathing? They are recapitulations of the gill-clefts which are used in the respiration of tadpoles, of fishes, and of still more primitive Vertebrates. In reptiles, birds and mammals the first gill-cleft or visceral cleft seems to become the Eustachian tube, which runs from the outer ear-passage to the back of the mouth, and the thymus gland is developmentally connected with another,





A SUGGESTED GENEALOGICAL TREE.



THE PILTDOWN SKULL.



THE NEANDERTHAL SKULL.



JAVA SKULL.

but the rest of them are useless and soon pass away. They are persistent relics of the past, unmeaning save in the light of evolution.

NAWAB SALAR JUNG BAHADUR,

IV

In the eyes of all competent naturalists the *fact* of organic evolution stands more firmly than ever, but there is great uncertainty in regard to the *factors*. This hesitancy is readily intelligible when we think of the difficulty of the problems and the newness of the inquiry. For in spite of the insight of the pre-Darwinian pioneers, we can hardly say that serious causal evolutionism (ætiology, as Huxley called it) began before "The Origin of Species" (1859).

The raw materials of evolution are the variations or mutations that crop up. Some regard these as due to peculiarities in the individual's surroundings, food, and habits; and there is no doubt that the *individual* living creature may be changed or modified in this way. But the question is whether these "modifications," as they are technically called, can be entailed in a representative way on the next generation. If this does not occur, then "modifications" cannot be of direct evolutionary importance to the race. This is the much-debated question of the transmissibility of "acquired characters," that is to say, whether bodily modifications imprinted on the individual as the direct result of peculiarities in environment, nutrition, use and disuse, can be handed on as such or in any representative degree. This should remain an open question until more facts are accumulated.

If new departures are not due to peculiarities in environment, nurture, and activity, in what other way can they arise? The answer is: *from germinal variability*. The novelties or new departures may be expressions not imprints, they may be outcomes rather than indents. Certainly there are many of them that cannot be connected with any peculiarities in nurture or habit. They well forth from the fountain of change within the germ-cells, which are in a sense implicit organisms.

The egg-cells and the sperm-cells, by which life is continued from generation to generation, seem to contain a multitude of "factors," "determiners," or "genes," that is to say germinal representatives of particular characters in the full-grown organism. In the fruit-fly *Drosophila* there are known to be about 7,500 of these factors or "genes"—hereditary cards which can be shuffled;

and we know that in the intricate processes involved in the maturation and fertilization of the germ-cells there are ample opportunities for permutations and combinations that might spell new departures in the resultant organism. There are some facts which suggest that deeply saturating environmental, nutritional and functional peculiarities, although not handed on as such, may pull the trigger of germinal changefulness. Perhaps, however, we must eventually postulate variability as one of the pristine characteristics of the living.

Heredity is the relation of organic continuity between successive generations, and it is of such a nature that while it allows of variability it tends to check it. The tendency of heredity is to hold fast that which is good, to secure the persistence of a specific organization. This desirable result is effected by what is called germinal continuity. This means, as Weismann said, that in each development a portion of the specific germ-plasm contained in the parent egg-cell is not used up in the construction of the body of the offspring, but is reserved unchanged for the formation of the germ-cells of the following generation. For this reason like tends to beget like.

Another great idea in connexion with heredity was due to Mendel, who showed that organisms consist, in part at least, of a bundle of "unit characters" which behave in inheritance as if they were indivisible entities. They do not blend or split up; they are continued intact in a certain proportion of the descendants; typically they re-appear in their entirety or else are quite absent. Their germinal representatives are the "factors," "determiners," or "genes" already mentioned, and we now know that the shuffling of these in the maturation of the germ-cells accounts for the way in which the relevant characters are distributed among the offspring, present in one and absent from another. Unit characters may be illustrated by the Hapsburg lip, having fingers all thumbs, "night-blindness," hornlessness in cattle, Angora hair in rabbits, crests in poultry, pink eye in fruit-flies, yellow seeds in peas, immunity to rust in wheat, and so on through a long list. All these peculiarities illustrate Mendelian inheritance.

We may think of the germ-cells as affording a crop of novelties; heredity is a condition securing or prohibiting entailment; but there are two other great factors that operate on the novelties that occur. These factors are Selection and Isolation. Selection is a general term

for all the processes of sifting and winnowing that occur in Nature. Natural Selection is Nature's sifting in the Struggle for Existence, which often rises to an Endeavour after Well-being. It is very important to remember that all the more vigorous organisms are agents in their own evolution. They are not passive seeds in a sieve. To change the metaphor, living creatures may be said to play their hereditary cards; they traffic with time, and trade with circumstances. Isolation is a general term for all the processes that narrow the range of inter-crossing and bring similar forms together. Perhaps there are other factors not yet discovered.

What Darwin proved in regard to Man was his solidarity with the rest of creation. We may surely recognize this solidarity without abating in the least our appreciation of Man's apartness—in reason, in language, in vivid self-consciousness, and in moral agency.

It is a travesty of Darwinism to say that it teaches that "man sprang from a monkey." No naturalist looks for man's origin or near relatives in any living monkey or ape. What Darwin demonstrated, so far as any such fact can be demonstrated, was Man's affiliation to an extinct stock common to him and to the anthropoid apes. Very long ago, certainly not less than a million years ago, a generalized stock, very vaguely known, divided into two branches, one of which is represented by Anthropoid Apes, which remained more or less arboreal, while the other is represented by modern man in his tentative predecessors, who left the trees. Darwin also sought to show, in his "Descent of Man," how the factors of Variation, Heredity, and Selection may have operated in Man's emergence; but our knowledge of these factors remains slight and vague. What is quite clear is that Man represents the outcome of a persistent trend in cerebral evolution, which began even before there were any monkeys at all. The trend, well investigated by Professor Elliot Smith, was the reduction of the smell-centres of the brain, and the increase of the region into which the other senses pour their tidings, and from which come the orders that control skilled movements. It is very striking to see in a series of brains, from tree-shrew, Tarsier and marmoset to monkeys, apes and men, the gradual predominance of the centres for vision, hearing, touch, dexterity, attention and unifying intelligence.

The pedigree of man is becoming gradually less vague. It illustrates a remarkable sifting-out process. Two or three millions of years ago the Simian stem began to send out its first tentative branches, and the result was a tangle of monkeys. After the humble marmosets there appeared the ordinary New World monkeys, and then those of the Old World, such as the baboons. The main stem grew on. After a time it gave off the lower Anthropoid Apes, and then the higher; but a divergent branch arose, the branch of Hominids. From this there came the tentative men, Hominids but not Homo—*Pithecanthropus* the erect, the man of Heidelberg, the Piltown Man, none of them, perhaps, in the direct line of human pedigree. And even the Neanderthal Man, though a species of Homo, does not seem to have been the direct ancestor of *Homo sapiens*, the modern man type. The Neanderthals had their day and ceased to be; the main stem split into African, Australian, Mongolian, Indo-Aryan and European races.

Man is the finest example of an evolutionary "emergence," that is to say, a genuine novelty, not a mere additive resultant. When he came to his own he was a being apart, a new synthesis; and personally we see no inconsistency in regarding the outcome of evolution as "the child of God."

VI

It is the duty of theology to accept the carefully scrutinized results of science, and to illumine them with *meaning*. What science discloses in Organic evolution is the gradual emergence of finer and nobler forms of life; there is a progressive victory of life over things; there is an increasing emancipation of the Psyche. The main trend of evolution has been integrative and progressive. This momentum is behind us. We should think of the Ascent of Man whenever we are reminded, by sad experiences, of his Descent. How can we refuse the illumination of the age-long process when we step beyond science and envisage the groaning and travailing of creation in the light of man, who is at his best a not unworthy climax? Science as such cannot prove Purpose, yet what it discloses is cumulatively suggestive of this. But Purpose cannot reside in the System of Nature; it must be referred to an Author—"unto whose measures moveth the whole."

The evolutionist picture gives the world-process unity, for it

points to man as the crown of Nature, the coping-stone (for the time being) of the great edifice which has so slowly, but so surely, risen through the inconceivable ages. Organic evolution has made for the emergence of mind, individuality, and personality; it has put premiums on health and beauty, the clear head and the loving heart. No doubt the ways of Wild Nature include self-assertion and insurgence, competition to the death and all the slackness of parasitism, but on the whole there is an advance towards the clear mind and the elementary virtues. It is an encouragement to man to recognize that there are great trends in organic evolution which are congruent with the ideals that are summed up in the human concept of progress, which we take to mean the fuller realization of the good, the beautiful, and the true. Our deliberate conclusion is that the evolutionist description, which Science gives, lends itself to a deeply religious interpretation, and discloses a world in which the religious can breathe more freely than when the atmosphere was befogged. And the best of it is that we have every reason to believe that evolution is going on, and on its main line.

CHAPTER IX

MODERN PSYCHOLOGY AND CHRISTIANITY

BY PROF. ROBERT H. THOULESS, M.A., PH.D.

When the scientific method is applied to the study of the activity of the human mind, the conclusions form the science of psychology. Within the past generation significant results have been obtained, especially in their bearing on religion.

ALTHOUGH the word "new" is at the present time freely applied to the science of psychology, a very little acquaintance with the history of philosophy will convince us that the study of the human mind (or at least speculation about the human mind) is as old as any branch of study. Yet, although the subject itself is old, there is something really and essentially new in psychology as it is treated at the present day. This is the fact that it is treated as a scientific subject and no longer as a branch of speculative philosophy. The persons interesting themselves in psychology at the present day are very generally scientists—doctors and men who have received their training in the physical and biological sciences—and not philosophers. These have brought with them a faith in the methods of experiment and careful observation and a distrust of mere speculation which have made something like a revolution in the study of mind.

The development of modern psychology is thus the most recent chapter in the history of the development of modern science. The essential method of all science has been the turning away from speculation as a method of attaining insight into reality and a turning towards the collection of facts by the methods of *observation* and *experiment* and the explanation of these by scientific hypotheses. It is not, of course, true that reflective thought has no place in science. On the contrary, the mere collection of isolated facts is no more science than is speculation apart from the facts.

The work of the kind of reflective thought used in science is the

bringing of the facts collected by observation and experiment under hypotheses which explain them as adequately as possible and which relate them to other collections of facts. This thinking does not generally follow the lines laid down by the speculative philosophers and is often entirely different from any way of thinking which was known to them. Modern mathematics as well as inductive logic are instruments of the methods of thought used by scientists. Even problems of psychology can sometimes be solved only by the use of mathematics. An example is Professor Spearman's use of the mathematical method of measuring "correlations" to show the nature of the "General Ability" which is supposed to be measured by intelligence tests.

Another feature of the scientific method which modern psychology has tried to make its own is its "objectivity." To attain truth in science we must be led by the facts alone. Neither our wishes nor our desire to frame a conception of the universe satisfactory to our aspirations may be allowed to influence us in the hypotheses we accept.

This objectivity is particularly difficult to attain in psychology, for the subjects with which we are dealing are most intimately bound up with our deepest desires. It is, for example, hardly possible to be objectively scientific in our consideration of such a psychological question as the evidence for the immortality of the soul. Yet this objectivity must always be our ideal, for in science our aim is always to be able to give an account of phenomena which will be independent of the point of view of the particular observer by whom they are described. When our emotions, our desires, and even our judgments of value are allowed to affect the account of phenomena which we put forward, our account ceases to be scientific, for it ceases to be independent of our own individual peculiarities.

The change from a pre-scientific psychology to the beginning of a scientific study of the mind was not merely a change in method or in the kind of person interested in the subject. The new method itself meant that a very much larger range of facts was brought within the scope of psychological study. Our recent knowledge of animal behaviour, of the facts of mental disorder, of the mental development of children, and of the physiology of the central nervous system and of the ductless glands have all contributed a wealth of new facts to psychology. Even these alone, without the

very important new facts contributed by psychological experimentation itself, would suffice to make modern psychology a totally different subject from that of earlier days.

It is sometimes urged that all these facts do not belong to psychology at all, and that it will be a good day for psychology when its students return to their proper task of studying the mind or states of consciousness. This objection would have force if we were to admit the view that the field in which psychologists may be interested must be for ever limited by the etymology of the word *psychology*. This view is, however, too absurd to be seriously argued. If we want to know what modern psychology is, we must find out what are the subjects in which psychologists do, in fact, interest themselves, and not discuss the purely academic question of what the word "psychology" originally meant.

A psychology limited to the meaning and classification of states of consciousness would, moreover, be a barren subject of little interest to the student of human nature. A man's conscious states cannot usefully be studied apart from his behaviour and his bodily make-up. Nor can we go far in studying man's behaviour without comparing it with that of the lower animals, and of children. This is why, in a modern treatise on psychology, we find a very wide variety of facts described, many of which would also be found in a text-book of biology or of physiology. In the text-book of psychology, however, they are treated with a totally different interest. Instincts are described (as they are in a book on biology), but only because they throw light on human behaviour. The structure of the brain is discussed, but only so far as it is connected with the problems of thought and conduct.

What gives modern psychology its position as a separate subject is not merely that it treats in part of matters (thoughts, feelings, etc.) not dealt with by any other science, but also that it deals with matters which do belong to other sciences with an interest and from a point of view which is wholly its own. This interest and point of view are provided by its interest in human thought and behaviour. On its theoretical side, modern psychology is attempting to understand and explain human thought and conduct; on its practical side (in psychological medicine, industrial psychology, etc.) to learn how to predict and control them.

Theoretical psychology has achieved a success when it has dis-

tinguished, let us say, a human instinct of acquisition related to the hoarding behaviour of the squirrel or the jackdaw, yet differing from theirs in the extent to which it can be dominated by man's power of thinking and diverted from his own individual needs to cultural ends. Practical psychology has similarly achieved a triumph when it enables the psychotherapist to understand the origin of, let us say, a patient's fear of enclosed places and to help his patient so to redirect his thoughts that he will be able to get rid of this fear and live as a happy and useful member of society.

If we want to have a definition of psychology which will take into account this wideness of its aim, we shall not be satisfied with calling it "the science of the mind" or "the study of states of consciousness." We must prefer some such definition as the following: *Psychology is the positive science of human thought and behaviour.*

The development of this new knowledge of the human mind meant, almost necessarily, the development of a new way of studying religion. Psychologists began to investigate religious belief and religious feeling in the same objective way as they studied other kinds of belief and feeling. This was the beginning of the modern psychological study of religion, a study whose influence on Christian thought it is our present purpose to discuss.

That such a method of investigation should be applied to religion at all must seem to many to be very undesirable. They doubt whether any advantage can come from a method of treating religious faith as a subject for scientific investigation. This objective method of treatment, which is clearly the only proper one in physics or chemistry, must, they hold, endanger the attitude of reverence towards religion.

With this and similar objections to our method of study, every psychologist must feel sympathy even though he cannot agree. It must, in any case, be remembered that even if we were to decide for ourselves that reverence for religion shall prevent us from asking the questions with which the psychology of religion is concerned, this would not prevent them from being asked. The ways of thinking suggested by psychology are far more widespread than is an accurate knowledge of psychology, and wherever these ways of thinking have penetrated, the essential questions of the psychology of religion are almost necessarily asked. If Christians refuse to face fearlessly

and reverently the problems of religion raised by psychology, that will not prevent them from being raised wherever religion is freely discussed. They will continue to be raised, not always reverently, at street corners, and often by the declared enemies of Christianity.

Christian believers, distrustful of our methods of study, may also be assured that the threat to faith is less than appears at first sight. The questions we ask in the psychology of religion are all about religious belief, feelings and practices, and not about the realities behind these. This means necessarily that the answers we give to our psychological questions will have little bearing on the properly theological questions of religious realities. We can never find out about the reality of an object merely by studying people's beliefs; and this is as true of religious beliefs as of any others. In studying the psychology of religion, we are leaving theological questions on one side. Indeed, the purely psychological study of religion is a neutral ground on which believers and unbelievers and even religious believers of different kinds can meet in fairly complete agreement, for the matters about which their opinion is divided will not enter into the question at all.

But even when this is admitted, the psychological study of religion will appear to many persons to be disturbingly near to the sacred intimacies of their faith. They will hesitate to investigate the mental roots of a faith which they feel to be too precious to endanger by a possible disturbance. May I suggest that the psychological study of religion is not for those who feel like this, and that they would be well advised to avoid it. The strength to question and examine the foundations of one's most sacred beliefs is not given to every man, and for some persons a study of the psychology of religion would be uselessly disturbing. The first comfortable unquestioning condition of faith must always be lost when once we have started intellectual examination of the ground of our faith, whether it is science, philosophy, or psychology which starts us on this examination. But the loss of this comfortable faith does not mean that the questioner has lost his faith altogether. Nor can this questioning be shirked by most of us. The intellectual Christian believes that God requires him to have religious faith, but not that He always means him to be comfortable. Much travail of mind may result from his conscientious attempt to "love the Lord his God with all his mind." Moreover, it is only when he has made such an examination of the

foundations of our own religious faith that he is able to understand and sympathetically to enter into the diversity of other people's faiths. The practical advantage of a psychological study of religion is that it promotes religious charity, and this is an advantage not to be lightly valued.

Although he was not quite the first writer on the psychology of religion, Professor William James of Harvard was the first to bring the subject into prominence before English-speaking people. He was asked to give the Gifford Lectures in the University of Edinburgh and chose this as his subject, afterwards publishing the lectures in his well-known book, "The Varieties of Religious Experience." This volume has been remarkably widely read by all kinds of people and is, I suppose, the starting-point of most persons who begin to study the psychology of religion.

James was, in many ways, peculiarly well qualified to undertake such a study. He was a happy combination of a scientist and a philosopher, and, although he did not himself adhere definitely to any religious creed, he had a wide sympathy and reverence for the religious faiths of others.

He was careful to explain that an inquiry into the mental origins of religious phenomena did not imply any judgment one way or the other on their truth or value. This warning is still necessary. Many people suppose that any opinion or feeling is discredited if we can point to its mental or bodily origin. They think that a man's political opinions are worthless if we can show how they spring from his own wishes, and that his opinions on the universe are discredited if we can attribute them to the condition of his bodily organs. But, as James pointed out, all opinions and all feelings may be traced to such lowly origins. Some of our opinions are true and some false; some of our feelings are of high value and some are not. We cannot discriminate between true opinions and false, or between valuable and worthless feelings merely by discovering their mental origins. "By their fruits," James said, "ye shall know them, not by their roots."

James studied many aspects of the religious life, including religious conversion. He brought forward strong evidence for the view that apparently sudden conversions are preceded by a period of development of the system of religious ideas and feelings which eventually overthrows the mental forces opposed to it. The converted person

himself is not aware of this process of development; James called it, therefore, a "sub-conscious incubation." He also made a detailed study of the emotional experiences of the religious life, particularly in the more extreme and striking forms in which they occur to the mystics. The philosophical conclusion to which James comes at the end of his study of mysticism may best be told in his own words:

"(1) Mystical states, when well developed, usually are, and have the right to be, absolutely authoritative over the individuals to whom they come.

"(2) No authority emanates from them which should make it a duty for those who stand outside of them to accept their revelations uncritically.

"(3) They break down the authority of the non-mystical or rationalistic consciousness, based upon the understanding and the senses alone. They show it to be only one kind of consciousness. They open out the possibility of other orders of truth, in which, so far as anything in us vitally responds to them, we may freely continue to have faith."

James himself anticipated the charge that in interesting himself almost exclusively in the unusual or abnormal manifestations of religion, he was presenting a caricature rather than a picture of religion. Few persons will doubt that this feature of his "Varieties of Religious Experience," while it increases the interest of the work, tends to detach it also from the important problems of everyday religion. This over-emphasis on the striking and unusual was perhaps to be expected in the beginnings of the psychological study of religion. But mystics are few and conversion is a crisis which occupies only a small fraction of the whole length of the religious life. It was necessary, therefore, that the psychology of religion should turn from its too absorbed interest in these things, in order to become a study applicable to the everyday affairs of ordinary religious persons.

Perhaps psychologists are still inclined to follow too closely in James's footsteps, for I suppose that there are still five pages written on the psychology of religious mysticism to every one written about the ordinary religious life. The tendency, however, at the present time is for psychologists to realize that the latter is the more important field for their future work. The question of what kind of teaching about God will save the young delinquent of the slums from

unhappiness and crime is a more urgent psychological problem than the nature of the visions of St. Teresa. It might, in fact, be said that the real importance for the psychologist of the study of mysticism is simply the light it throws on the origin and nature of the religious experiences of the ordinary person.

With the application of psychological study to normal religion we must deal only shortly. The main purpose of this chapter is to show the position of the psychological study of religion in the thought of our time, and not to try to give an account of all the matter which would be found in a text-book of the psychology of religion. That could only be done in a much greater space, and for an adequate account of the matter we must go to the text-books themselves. We must here be content with only the briefest possible outline of the subjects to be discussed and investigated by the psychological student of religion.

He will first ask what kind of a thing, on its mental side, religion is. He will notice that it belongs to the class of what psychologists describe as *sentiments*. Sentiments have been defined as those greater systems of character which organize and direct the emotions. They are such mental dispositions as a man's love for his wife, his loyalty to his country, or his hatred of an enemy. The religious sentiment is a different kind of sentiment from most other sentiments in the fact that it is not directed towards a single limited object. Its object is the universe as a whole. It is the nucleus of a way of acting, of thinking, and of feeling about the whole of things.

Following the ordinary use of the word "religion," we shall not call any sentiment about the universe as a whole a religious sentiment, but only if it has certain characteristics. Of these the most important is that in its way of thinking about the universe there is a belief in God (or in gods), that its feelings are largely feelings appropriate to Him (that is, they are of love, awe, and dependence, not of anger or rebellion); and that its modes of behaviour are those of prayer and ceremony directed toward Him and of a moral life pursued for His sake. The Christian religion is one in which the religious sentiment centres round a conception of God which was presented to men by the teaching of Jesus Christ.

The psychologist notices that there are other kinds of sentiment about the world as a whole in which there is no such belief in or feeling about God at the core of the sentiment. These are non-

religious systems. Such were, for example, the system originally taught by the Buddha and the positivism of Comte. A modern man may accept such a non-religious system either because his processes of reasoning seem to him to make the religious ways of believing unacceptable, or because his emotional reaction to the world as a whole is opposed to the religious ways of feeling.

The religious person and the non-religious person who has a definite way of thinking and feeling about things as a whole have alike departed from the animal condition of thinking and feeling about, and reacting to, only the immediately present and apparent. Both alike are adjusting themselves in thought, feeling, and action to that wider environment which only attains reality for the creature with developed powers of reflective thought.

The psychologist cannot fail also to be particularly interested in the methods and results of religious teaching. He will notice that in every individual's religion there is what may be called a "traditional element" which is received from others, partly by teaching in childhood and partly by the influence of the other persons forming the social group around the individual in his adult life. This traditional element is by no means accepted altogether passively, being afterwards acted upon by the reasoning processes of the individual concerned and by his own personal religious experiences. Yet the actual acquisition of the traditional element is in very large part by the passive process of reception of opinions from other persons which psychologists call "suggestion." This observation throws a good deal of light on the practical problems of effective religious preaching and of the religious teaching of children.

There is also the question of the nature of the emotional driving force behind the religious way of adjusting oneself to the world. Is there a religious instinct? This is a question which we cannot regard as settled, but the general opinion amongst psychologists would be against the existence of a separate religious instinct. It is, in any case, agreed that the energy of other instincts may be directed into the religious channel—i.e. that the love unsatisfied on earth may be directed to God, and that the instinct of pugnacity may be the driving force behind the individual's fight against moral evil. The highly emotional religious experiences of the adolescent convert are not to be understood unless we realize the connexion between the religious crisis of adolescence and the development of the sex

instinct. There is, at this time, a rapidly developing capacity to love which finds no adequate human object, and which may find its outlet in religious fervour. Understanding this relationship, we may see that the intensity of the fervour itself cannot be expected always to endure at the height it reaches at this time. Its end in religious development will, however, have been served if it initiates habits of religious thought and action which will remain a permanent possession of the adult.

In studying the common factors in all men's religious adjustments, it is important also that the psychologist should not neglect the study of the mental origins of the difference between different individuals' religions. It is certain that the system of religious beliefs, actions, and feelings, which are satisfactory to one person are not to another, and this diversity is a problem in individual psychology, the solution of which has hardly yet been attempted. Part of the diversity is due, no doubt, to differences in temperament—to differences in the relative strength of the instincts in different persons or in the general character of all their emotions. Some of these differences may not be truly inborn, but may be due to varying conditions of childhood development. This is a possible source of individual differences which is particularly emphasized by the psycho-analysts. Even variations in the type of imagery, such as were investigated by Galton, may be the source of otherwise inexplicable differences. A difference between the strength or kind of their mental pictures may be a reason why ceremonial deeply moving to one person may appear trivial to another. This is a subject on which much research remains to be done.

Not all writers on the psychology of religion have maintained that detachment from the questions of truth and value which has here been indicated as an ideal. Flourney, indeed (whose is one of the other great names in the history of this subject), although himself a religious believer, affirmed and practised in his writings what he called the "principle of the exclusion of transcendence." This meant that, for the purpose of his study of religious phenomena, he considered them simply as mental facts apart from all questions of an outside reality with which the religious person might be in contact. Professor Pratt of America, Professor Bovet of Geneva, and many other writers, have followed this leading.

There are, at the same time, more definitely religious writers on

the psychology of religion, amongst whom we may mention Professor Berguer (author of a bold but reverent account of the life of Jesus from the psychological point of view) and the Jesuite Professor Maréchal, who has written on mysticism. Among English writers we may notice Dr. Selbie, who has written a book on the Psychology of Religion from a point of view too close to religious apologetics to appear altogether satisfactory to a psychologist.

There is also an increasing number of books written by theologians on this subject whose aim is entirely and frankly apologetic. Their purpose is to defend religion against the onslaughts of sceptical psychologists and not to help in an impartial investigation. These books are of very unequal value. Many are written with imperfect knowledge of what psychologists really teach, and with a greater desire to defend religion at all costs than to make that effort towards clear thinking which is necessary in order to defend it satisfactorily.

Contrasting with these writers are those (like Professor Leuba) whose psychological studies of religion tend towards the discrediting of orthodox Christianity. The scientific value of these works too is reduced so far as their authors depart from the rule of strict impartiality in investigation.

The psychological study of religion is, then, a branch of study which is detached from the studies of theology and the philosophy of religion because it is concerned with a different kind of question. It is occupied with questions of fact and not of value, with religious beliefs and emotions and not with the realities behind them.

Individual psychologists may be agnostics or religious believers. Their fundamental differences of belief need not prevent them from coming to agreement on the neutral ground of the psychology of religion. Psychologists may even admit that the questions which occupy the minds of theologians are of more ultimate importance than their own questions (and much less easy to decide). Clearly the question of whether the human soul is immortal is incomparably more important than the purely psychological question of how man came to believe that he was immortal, questions of the first kind seem at present not to be soluble by the application of the scientific method. For the purpose of their own study, psychologists leave such questions on one side, not because they under-estimate their importance, but because they must leave them if they are to found

a truly objective and scientific psychology of religion. Their task is to try to understand religion and not either to defend or attack it.

We have so far been discussing the application of theoretical psychology to religion. Modern psychology has also its practical side. In education it has been applied to the investigation of the best methods of teaching and of learning; in industry to the study of the best methods of work; in medicine to the task of restoring harmony and mental health to the disordered personality of the psycho-neurotic. No one who knows anything about psychology can fail to make some attempt to apply his knowledge to his own problems in these spheres—to his mental or manual work and to the control of his own mental life. He will find help in this task proffered by the advertised memory systems and by modern semi-religious bodies which inculcate practices of "mental control." The existence of these bodies will make us realize how near is this function of psychology to part of the function of organized religion. It is part only of the function of religion, for religion is concerned with more than the task of giving its members mental health.

Our knowledge of psychology teaches us again many old truths to be found in the teachings of Christ Himself. If we wish to attain mental health we must cast out altogether the harmful mental processes of worry, of anger against other persons, and of fear; we must cultivate kind behaviour and kind thoughts towards all; we must learn a happy resignation towards all the evils and sorrows of our lives which our own efforts do not enable us to avoid. To many persons these teachings of the Sermon on the Mount seem to come with new force when they are found in a text-book on psychology.

The questions of the psychology of religion have been raised, but not yet finally answered. In the psychology of religion, as in psychology itself, we are dealing not with a completed science but with a science in that early stage when conclusions are put forward by some investigators and as hotly contested by others. At this stage, too, much of the data from experiment and observation, which will be necessary before we can draw final conclusions, has yet to be collected. The regularities underlying man's religious thought and behaviour are certainly much more complex than those of the physical sciences; so it is unlikely that we shall ever be able to state their laws as simply and definitely as we can those of the physical sciences. But already assured and agreed conclusions have emerged

from the psychological study of religion, and all those whose interests are engaged in this work believe that this body will increase until we have certain and exact knowledge of many things about which there is, at present, uncertainty and diversity of opinion.

This body of assured knowledge will grow in volume and importance as students of the psychology of religion turn more and more to the patient collection and interpretation of facts and away from the seductive path of arm-chair speculation. The foundations of a truly scientific psychological study of religion have been well and truly laid by such writers as William James, and it remains as part of the task of our times to help toward the completion of this structure. In this task all those with the true scientific enthusiasm for the investigation of new fields of knowledge may join. They may be assured that true religion must be benefited and not injured by any truly scientific study.

BOOK III

CHRISTIANITY AND SOCIOLOGY

One of the newest of the sciences is sociology, a term that a century ago would have conveyed no meaning. Its field is the relation of human beings with one another, and hence it is of vital interest to Christians. For Christianity is concerned with precisely the same field. Everywhere Christians are eagerly intent on shaping a new social era.

- Chapter X. THE MODERN SOCIAL PROGRAMME
- XI. CHRISTENDOM AND THE WORLD
- XII. SOCIAL JUSTICE
- XIII. THE PROBLEM OF EDUCATION

CHAPTER X

THE MODERN SOCIAL PROGRAMME

BY THE REV. CANON C. E. RAVEN, D.D.

The Industrial Revolution changed the whole relation of man to nature and to his fellows, and a new field for Christian thought and effort was opened. A more adequate conception of the corporate aspect of religious life resulted in a reaction against individualism and the practical acknowledgment of the apostolic injunction that we are members one of another.

FUNDAMENTAL to the Christian Gospel alike as a rich portion of its heritage from the Old Testament, and as receiving a new and peculiar emphasis in the teaching of Jesus Christ, is the idea of the rule or Kingdom of God. In the Sermon on the Mount, in the Lord's Prayer, and in a succession of Parables the aspirations of Israel are given a clear and universal significance. Whatever be the final verdict of scholars upon the Apocalyptic writings in the New Testament, no student of the Gospels can deny that our Lord believed that human nature and human society were conformable with this ideal, and that He revealed to His disciples what the doing of the divine will "on earth as it is in heaven" would involve for them and for mankind. St. Paul, as he gradually grew less confident of the speedy coming of the Kingdom in the triumphant return of its King, substituted for his first hope the picture of a humanity built up by love into the unity of a single organism, the Body of Christ in which every Christian as he gave himself to the guidance of the one Spirit was incorporated as a member. And from that time to this the vision of man's corporate life as ordered in every department by the divine purpose has been the abiding inspiration of Christian civilization.

The reader will remember how such an ideal was given splendid if incomplete fulfilment in Hildebrand's conception of the Papacy, and how when that magnificent dream faded and the Papal Church fell into decay the reformers in their various ways strove

to formulate and adopt new means to the same end. If in both cases, though in opposite directions, there was exaggeration, so that in mediæval times the duty of obedience and at the Reformation individual liberty took too large a place in Christian thought, we can at least face our present problems with the knowledge that our task is twofold, that the conversion of individuals and the reform of the social order can neither of them be realized without the other, that the two processes must be pursued side by side, and that to set them in antithesis and insist that one or the other is the Christian's sole concern is to fall into serious error.

Such a conviction, platitudinous as it will appear, is in reality somewhat of a novelty. It is indeed a consequence, a sadly delayed consequence, of that greatest of landmarks in man's secular history, the Industrial Revolution. In John Wesley's day the old order still prevailed. The bulk of the population lived on the countryside. Communities were small and to a great extent self-sufficing. Food, clothing, houses, all the necessities and many of the luxuries of life, could be supplied locally. The horizon, and the responsibilities, of the mass of the people were confined to the village and township. The individual was master of his fate, even if his mastery were not very extensive. Once converted, he could set his home and business running upon Christian lines and keep himself largely free from being a partaker in other men's sins.

In two generations throughout Western Europe and the Eastern States of America this old and simple way of life had passed out of existence. The discovery and application of steam-power changed the whole relation of man to nature and to his fellows. Mass-production by machinery supplanted the cottage workshop: specialization and the regimenting of labour accompanied it: huge and ill-planned cities sprang up almost in a night around the factories: railways and steamships brought raw materials from the ends of the earth to their gates: the population, now rapidly increasing, was drawn from the country to the streets: the individual lost the power to contract out of a system by which he was fed and clothed and housed, and too often enslaved: vast problems for which the whole body politic was responsible and which only corporate action could hope to solve were created: a new field for human and therefore for Christian thought and effort was opened.

So brief and superficial a statement will at least suffice to show

that the Church at the beginning of the nineteenth century had a fresh call to proclaim her good news of the Kingdom, and fresh difficulties to face if her voice was to be more than a despairing protest. Unhappily she entered upon the industrial era ill-equipped, and for fifty years said almost nothing. The eighteenth century had been a period of comparative slackness and degeneracy; and even the heroic adventure of Methodism had been undertaken at a time and consequently upon lines little suited to meet the needs of industrialism. In consequence the democratic movement, which took shape as soon as the workers in the new order realized their sufferings and secured the opportunity of co-operation, lacked at its birth the help and guidance of the Churches, and many of its leaders frankly proclaimed Christianity as an enemy. In doing so it must be confessed that they were not without justification. Class-feeling was deeply engrained in Church as well as State; and the French Revolution had horrified the respectable and seemed to identify democracy with anti-clericalism if not with atheism. In addition, the religion of the Reformed Churches had become pietistic, other-worldly, and wholly individualist. To save souls for heaven and to preach acquiescence in evil conditions on earth were virtually synonymous duties. Even the few who were not blind to the horrors of that hideous epoch looked upon the poor simply as objects of private benevolence, and neither realized nor attempted to control the development of corporate life. Thus, although certain individual Christians took a prominent part in alleviating particular evils, their special version of the Gospel disqualified them from any large treatment of the issues of the time or any considered attempt to envisage the new order in its relation to religion and the Kingdom of God. A fresh interpretation of Christianity was needed if men were to "see life steadily and see it whole" in the light of Christ.

It would be out of place in a brief and general survey to recount the efforts or criticize the views of the few pioneers who in that depressing age drew attention to various evils and in the name of Christ demanded their redress. Great as were the achievements of such Christians as Elizabeth Fry, William Wilberforce and Lord Shaftesbury, it will be admitted that they were both exceptional and limited in outlook. They showed, and showed heroically, what could be done by the old theology and the old individualism. What was lacking was an adequate conception of the corporate aspect of

religious life, and an adequate valuation of the Gospel of the Kingdom. For the former of these the English-speaking peoples owe a deep debt to the Oxford Movement, and for the latter to Frederick Dennison Maurice. The modern conception of the relation of Christianity to sociology is mainly derived from the union of these two streams of influence.

To claim for the work of Keble, Newman and Pusey a place of prominence in the development of what is conveniently called the Social Gospel may well provoke criticism. Certainly such a result of their work was unforeseen by them: probably if foreseen it would have been repudiated. But whatever be thought of their main contentions and of the methods by which they advanced them, it will be admitted that they set on foot the first strong reaction against individualism in religion, that they saw the Church as a society with an organic life of its own, and that by reasserting the place of corporate loyalty and corporate responsibility in Christianity they introduced ideas which would inevitably be applied in larger fields than theirs.

Maurice's position is more secure. Influenced as he certainly was by Coleridge and Carlyle, and far more strongly by that great social thinker and worker J. M. Ludlow, he was yet the first in modern times to formulate a theology which did justice to the Pauline and Johannine interpretation of the Kingdom of God, to the ideas of membership one with another and the mutual bearing of burdens, of Christ as the Way and the Truth and the Life, and of Love as the essence of Deity. In his books and sermons, in his lectures and teaching, in the Christian Socialist movement, in the Working Men's College, and above all in his personal dealings with others he strove to bring all social relationships within the guidance and the life of Christ, to show how each and all of them must conform with the eternal principles of the Christian revelation, and to translate those principles into appropriate activities. Of his immediate disciples, Charles Kingsley, Thomas Hughes, E. V. Neale, Octavia Hill and, to a large extent, John Ruskin popularized and applied his work. And a multitude of men and women in other denominations who had been drawn into social service up and down the country joined their influence with his.

Consequently in the next generation a profound change began to take place. Although many Christians were afraid to leave the

narrow limits of what they called "spiritual work" and, if interested in social questions at all, confined their attention to the evils of gambling, intemperance and sexual immorality, theirs was no longer the universal attitude. In all the Churches there were those who realized that they had been tolerating, if not supporting, the existence of social conditions which gave the lie to their religion, conditions by which a vast number of their fellows were deprived of all the means to a decent life. Such men recognized that their Christianity forbade them to acquiesce not only in admitted evils like sweated labour, insanitary housing and the unrestricted exploitation of women and children, but in the existence of economics divorced from ethics, of an industrial system based on sheer competition, and of a public opinion which contrasted business methods with the Sermon on the Mount and complacently followed the former. At the same time they saw that the situation was too complex and too difficult for mere sentimentality or pious intentions, that they must study and think if they were to act, and that such preparation was an essential duty of the Church.

So in the Anglican Church descendants of the Oxford Movement like Canon Scott Holland and Bishop Gore joined forces with spiritual sons of Maurice like Bishop Westcott and in 1889 founded the Christian Social Union. Other denominations formed similar bodies among their members soon after, and gave the study of social problems an official place in their Church-life. From the first it had been recognized that in such matters Christians of all Churches could and should co-operate. Joint action both central and local had demonstrated that the old ecclesiastical and doctrinal differences were irrelevant to the issues at stake in the quest for social righteousness. So, when in 1910 the Interdenominational Conference of Social Service Unions was established as an annual event, the opportunity for Christians to speak with a common voice was rendered possible. These meetings revealed the need for a more thorough and adequate survey of the whole field of corporate life; and after the Great War preparations on a large scale were undertaken. The subject was parcelled out into eleven sections, and Commissions of experts were appointed to report upon each of them: all the Churches were invited, and almost all agreed, to send representatives to receive and discuss the results of their investigations: and a widespread scheme of study was initiated throughout Britain.

"Copec," as this Conference on Politics, Economics and Citizenship came to be familiarly called, marked the first detailed attempt of the Church to bring the corporate life of the time to the test of the Christian Gospel, to discover what was God's will for the ordering of His human family, and in the light of Christ's revelation to discuss and pronounce upon the whole field of sociological study. The very wide sale of the twelve volumes of the Report and the enthusiasm with which the work was taken up are testimony to the need and to the opportunity. Similar efforts embodying the labours of a number of individuals and societies were undertaken on the Continent and in America; and in 1925 the World Conference on Life and Work met at Stockholm to co-ordinate and review the whole movement.

We have related in this summary and selective fashion a few of the more significant happenings in the development of social thought and effort in the British Churches in order to make plain the change that has taken place. A similar story could be told of Christian sociology in other lands; for, indeed, the application of Christ's teaching to social conditions is due not so much to particular prophets and pioneers, as to the new and wider outlook which the scientific method has given to religion. We have gained in the last two generations from the study of the New Testament a vivid understanding of the part which the Kingdom of God occupied in the mind of our Lord; from the investigation of the nature of the universe and the history of man an enlarged conception of the unity of life, a breaking-down of the barriers between secular and sacred, material and spiritual, a warning that for the Christian nothing which affects the welfare of mankind is common or unclean; from the development of civilization a conviction that only a world-wide, consistent and thorough application of the principles of the Gospel can discharge the Church's task and supply a secure foundation for the commonwealth of humanity. As we have learned the scope and character of our faith, the knowledge has led everywhere to the study and reform of social conditions. The awakening is not yet complete: but, as the New Reformation spreads, its influence upon corporate life will expand and deepen inevitably and apace. The Church may yet be in time to save the world from chaos.

This is indeed the issue of the day. The colossal changes in man's way of life which are symbolized by the industrial, the democratic

humanity can be permanently satisfied, and a clear lead as to the methods by which such values can be embodied in a worthy and righteous social order.

When Jesus declared that food and clothing and all those things *which the nations desire would be added to them if they sought first God's Kingdom and righteousness*, and when His great disciple maintained that "all things work together for good to them that love God," the principle which should underlie Christian citizenship was given an abiding sanction and an abounding hope. It remains for the Church to devote itself to the study and fulfilment of its commission. Christianity, which has been hitherto the torch-bearer of civilization, still holds in trust the light of the world: is it over-optimistic to confess the belief that the nations are discovering in these dark and difficult times that only in His light can they see light?

CHAPTER XI

CHRISTENDOM AND THE WORLD

BY THE RT. HON. THE EARL OF OXFORD AND ASQUITH

The hope of the Dark Ages ; the protection given by mediæval Christianity to civil and political independence ; the debt of the modern world to it, and the present-day responsibilities of the Church.

TO deal adequately with the relations between Christianity and its political and civil environment would require a volume or series of volumes, and an equipment of knowledge and research to which I can make no pretence. I shall only attempt to emphasize in a brief survey a few more or less familiar points.

One of the essential differences between Christianity and the religions of the ancient world, which it was destined to supersede, was that it was not bound up, as they were, with the civic life of any community. The "patriotic virtues" are not its creation, nor does it give them, directly, at any rate, any new or specific sanction. At the time when the Gospels and the Epistles were written Europe and large parts of Asia and Africa were ripe for a cosmopolitan religion. The isolated civic autonomies of Greece and primitive Italy had long been submerged; the sense of nationality, as we understand it, was still unborn; the Empire, one, indivisible, to all seeming invulnerable, embraced all that counted in the known world in a unity, which allowed free play within a wide range to local diversities; but which covered and safeguarded the whole under the shelter of what Pliny, writing at the end of the first century of our era, well calls the "*immensa Romanæ pacis majestas*"—the universal supremacy of Roman peace.

As Dill points out in his admirable book, "Roman Society from Nero to Marcus Aurelius," the "religion of Numa," which persisted to the end of the Roman Republic and far on into the days

of the Empire, penetrated the whole fabric of Society, "consecrated and dignified every public function," and was regarded as "inseparable from patriotism." It did not "demand any profession of faith"; all it required was "ceremonial purity and exactness." The religious instinct—as we should call it—sought satisfaction under the Empire, not in the State Church, but in the Stoic and Neo-Platonic systems of philosophy, and in the mysticism and the rites of the Oriental cults. Marcus Aurelius, a Stoic of the highest spiritual type, was punctilious (as had been the sceptic Hadrian) in his devotion to the worship of the old gods. If he persecuted the Christians, it was not because of their doctrinal tenets, but because they refused to conform to the outward observances which were expected, from the Emperor downwards, of every good citizen and patriot. Nothing, it may be noted in passing, can be more different in temper and motive than the crusade which, after the newly-won ascendancy of Christianity had become officially secure, was carried on by rulers like the Emperor Justinian against heresy and paganism alike. By the end of the sixth century orthodoxy had become a condition, not only of admission to the service of the State, but of the enjoyment of the common rights of citizenship.

Gibbon, in his famous and much controverted Fifteenth Chapter, has enumerated and analysed various causes which contributed to the rapid progress, and combined to bring about the ultimate triumph, of the new religion. Amidst much that is disputable, one thing is certain—that in its early days, when it gained the foothold from which the perversities of ecclesiasticism and the enslavement of State patronage never wholly dislodged it, Christianity was a missionary faith; cosmopolitan in its claims and in its range; independent of any particular form of earthly polity; with its vision always straining towards the heavenly kingdom where Christ was to reign with His redeemed. "*My Kingdom is not of this world.*" "*Here we have no continuing city, but we seek one to come.*"

Even through the Dark Ages that primitive ideal continued, however fitfully, to hover, to the eye of faith, over the visible horizon of confusion and chaos. There was no more widely diffused belief than that the thousandth anniversary of the birth of the Saviour would witness His Second Coming, not only to judge the quick and dead, but to put under His feet all principalities and powers, who were to make way for a new heaven and a new earth.

These hopes were doomed to be disappointed. Much has been written, and justly, of the protection which the mediæval Church in its best days afforded, consciously and unconsciously, to the struggling germs of civil and political independence. The time came for an internecine struggle between the organized Church, wielding its spiritual thunders, while not disdaining the aid of the arm of flesh, or the worldly methods of statecraft and chicanery; and the competing Supremacy of the Empire. The disputants on both sides enlisted in their service not only the hordes of mercenaries who periodically ravaged Italy, but the trained intellects of the most acute and gifted dialecticians of the age. Questions as to the demarcation of the two domains were debated with infinite subtlety by such men as Thomas Aquinas, Dante, and Wyclif—questions as far removed as the poles from the simple message of the New Testament. Things went steadily from bad to worse. The Papacy became a byword. The “Babylonian Exile” at Avignon, the Great Schism, the abortive councils, the succession of Renaissance popes which culminated in the figures of Alexander VI, Julius II, and Leo X, gradually forced upon earnest and devout Christians all over Europe the conviction that, without a miracle, the spiritual mission of Christianity, as embodied in the Church, had come to an end. It is said—I do not know on what authority—that when a pious ecclesiastic was urging Leo X to do something to curb the abuses which were crying aloud for redress, the vicar of Christ pointed to a Crucifix, with the remark: “Behold the fate of a Reformer.”

The sack of Rome by Imperial mercenaries, which followed (1527), was widely regarded as the tardy judgment of Heaven. It nearly wiped out of existence the Eternal City, and was marked by excesses of rapine and bestiality prolonged for months, which far outstripped in wanton and irreverent destructiveness the worst that had been done by Goths, Vandals, and Normans in the past. For all that, it was the prelude to what is called the Counter-Reformation.

Nor can even the most ardent of Protestants find it easy to vindicate or excuse the political firstfruits of the Reformation itself. There was, among the Reformers, little to choose in intolerance and uncharitableness between Lutherans and Calvinists. The murder—for such it was—of Servetus (1553) at the instance of Calvin him-

self, and the Protestant oligarchy which dominated the Republic of Geneva, is a black crime even in the annals of persecution. Yet it had the approval—for Servetus had unsound views on the Trinity—of the gentle and humane Melancthon. The Thirty Years War in the first half of the seventeenth century, in which the adherents of the old faith and the new exhibited an impartial disregard of the teachings and the spirit of the Gospel of Christ, was one of the most purposeless, as well as one of the most cruel and destructive, in history. It was a struggle in which the competing fanaticism of Catholics and Protestants, over the greater part of the continent of Europe, let loose all the worst passions of dynastic rivalry and territorial lust. As the great Protestant champion, Gustavus Adolphus, candidly avowed: "All the wars that are on foot in Europe have been fused together, and have become a single war." It had not a single ennobling or even redeeming feature. It was, in Coleridge's words:

"A wild and dreamlike tale of blood and guile—
Too foolish for a tear, too wicked for a smile."

There has been no avowedly religious war since the Peace of Westphalia. But it is not too much to say that, with rare and transient exceptions, the admixture of Christianity, in any of its organized societies, with the sphere of Civil Government, has smirched and paralysed the one without spiritualizing or purifying the other.

The real contribution which Christianity has made to the betterment of political and social conditions is to be found in the indirect influence, slow and fitful, but clearly discernible in the course of history, of some of its formative ideas.

Take, for instance, the postulate which underlies its whole message and mission: the essential and independent value of the individual human being. A similar conception is found groping its way to the front among the later speculations of the best of the Stoic thinkers. But Stoicism never obtained any hold upon the common people; it was not a missionary creed, but a Rule of Life for the spiritually elect; and its saints and martyrs, if such they can be called, saw nothing incongruous with their faith in ending their lives by suicide. There was nothing that shocked their conscience in the enslavement of man by man. The proportion of slaves to free men in the best days of the Roman Empire is almost incredible. It is true that, from the time of Nero to that of the Antonines and

Alexander Severus, there was progressive legislation for the protection of slaves. It is also equally true that, a thousand years later, the new forms of slave traffic and slave holding introduced by the Portuguese and Spanish conquerors of America, and developed to our eternal shame by English adventurers and colonists—all of them professing Christians—led to extremes of cruelty and degradation which could hardly be paralleled in the Roman world. To realize the extent and gravity of these abominations in quite modern times, it is only necessary to read the brilliant but depressing chapter on "The Shadow of the Slave Trade" in Mr. and Mrs. Hammond's recently published book on "The Rise of Modern Industry." "In the West Indies the negroes brought from Africa [in British ships] were exposed for sale under the British flag and sent to serve European masters all over the New World." But slavery as a domestic institution may be said to have been stamped out in Christian Europe by the end of the twelfth century. Its extinction was no doubt helped by economic causes, but it may fairly be regarded in the main as the slow-coming achievement of a Christian ideal. From that time onwards it is probably near the truth to say that no Christian country in Europe (with the exception of Portugal) practised or permitted slavery within its own borders. In one of the most famous cases in the annals of English law, it was decided (1772) that a slave who set foot on the soil of England ceased to be the property of his master and became a free man.

It was otherwise in the United States of America. During the first three quarters of the eighteenth century slave labour was employed on a large scale not only in the South but in New England and the Northern States. In a most remarkable book, which was commended by Lord Morley as "Christianity at its best and rarest," the "Journal of John Woolmar," the writer describes how in the course of one of his evangelical tours—he was a Quaker "minister"—he came (in 1760) to Newport, Rhode Island. He saw the slave ships with their cargoes of negroes lying at the wharves of the town; the "sellers and buyers of men and women and children thronging the market-place"; and among them not a few belonging to his own Society of Friends. It was largely through the devoted efforts of Woolmar himself and his fellow Quakers that the movement was set on foot which a hundred years later reached its goal in the Emancipation Proclamation of President Lincoln.

The Church of England, through some of its official spokesmen, cut a sorry figure in the agitation which led in Great Britain to the abolition of the slave trade and of colonial slavery. That it should have taken so long to extirpate such an institution from the civilized world illustrates how slowly the Christian leaven may work. For slavery involves the negation of one of the cardinal doctrines of St. Paul—that Christ died for the whole human race, every member of which, whether Jew or Gentile, bond or free, became potentially a Son of God, and an heir of the Kingdom of Heaven.

It is not necessary, by way of further examples of the working out of the same principle in different fields of application, to dwell on the changes which largely through Christian ideas have gradually permeated men's views on the relations of the sexes, and the sanctity of child life; changes which have left their imprint in all the legislative codes of the civilized world.

Perhaps not the least of the direct debts which the modern world owes to mediæval Christianity is that it created and kept alive the educational machinery which, on the political no less than on the intellectual side, in the long run emancipated and enlarged both the thoughts and the practice of man. It is true that at a time when the culture of the West was under a total eclipse, and that of Byzantium was stagnating in a lifeless pool, the Saracens, more especially in Spain, had fostered a vigorous intellectual life of their own, upon which Christian Europe began to draw. "The later Saracens of Spain," says Mr. J. M. Robertson in his learned and suggestive book on the "Evolution of States," "whatever the measure of their own scientific progress, were without question a great seminal force in the civilization of Western Christendom, which drew from them its beginnings in mathematics, philosophy, chemistry, astronomy and medicine, and to some extent even in literature and architecture. Students flocked from France and Germany and England to drink from the fountain of learning which flowed only in the cities of the Moon." But the golden era of Mahometan learning was of relatively short duration; it gradually shrivelled under the double blight of political divisions and religious fanaticism; and it did not survive (roughly speaking) the beginning of the thirteenth century.

When due allowance has been made for this important contributory stream, the largest share in the credit of organizing Christian culture as an effective force, not only in philosophy but in

juristic and political conceptions, throughout Western Europe must, in fairness, be set down to the Church. The studies of law and theology went hand in hand in the schools of Bologna, Padua, and Rome itself. Three out of the four Scottish Universities are of papal creation. As there was one common language for all educated men, the students were a nomad race, who flocked from Oxford to Paris, and from Paris to Bologna, to listen to the fashionable teachers of the age. All the greatest of the "Doctors" of scholasticism belonged to one or other of the two new Orders of Friars: Roger Bacon and William of Ockham were Franciscans, and the "Angelic Doctor," Thomas Aquinas, whose writings remain to this day the authorized philosophical storehouse of the Roman Church, was a Dominican. The part played by Oxford culminated for a time in the teaching and work of Wycliffe, the "Evangelical Doctor," who also earned the title of "the Father of English Prose." He created and organized a propaganda, the "Simple Priests," who diffused his doctrine, of which the keystone was the right of every instructed man to examine the Bible for himself, throughout the length and breadth of England, with the result that, before long, the official supporters of the Church had ruefully to confess that "every second man one meets is a Lollard." Lollardism was suppressed by force in the University itself, to its lasting injury, as a centre not only of intellectual but of national life. "The century," says Green, "which followed is the most barren in its annals, nor was the sleep of the University broken till the advent of the New Learning," when Colet and Erasmus sowed at Oxford the seeds which grew and multiplied till they transformed both Church and State.

It is strange that the last lesson which Christendom has learned throughout the ages is that of Religious Tolerance. Fifty years ago, when the Balkans were in one of their periodical fits of political unrest, a distinguished English statesman said, wisely and wittily: "The real trouble in the Near East is that the Turks are half-dead, and the Christians are only half-alive." It is true that in the religious sphere the persecution of opinion, as such, is no longer fashionable, if it is not altogether out of date. In all the international instruments, such as the Treaty of Versailles, under which destroyed or decaying empires are partitioned, and new states brought into existence to divide their inheritance, it is now almost a matter of course to insist, as a condition of the grant of autonomy, upon the observance of

strict equality of treatment for all shades and colours of religious belief. It is too early yet to pronounce whether the paper safeguards which have been so profusely provided for unpopular sects—such, for instance, in the east of Europe as the Jews—will prove adequate in practice. But it is a sign of the homage which is now tardily and officially paid by all professedly Christian communities to the idea of tolerance, that it is only under the avowedly anti-religious regime of the Soviet Governments of Russia that it is openly flouted and set at defiance.

And thus we are led to what is of more practical importance than any survey of the past: the question what effective sanction and motive force organized Christianity is prepared to contribute to what has become the supreme international need, the Abolition of War. The lines of Coleridge, which I have already quoted, were, when they were composed, no melodramatic or hysterical outburst. They have become more, and not less, appropriate now that war has revealed upon a world-wide scale its newly developed actualities, to which science is threatening to add in the future fresh devices of unimagined destructiveness and cruelty. Christianity is not in itself a pacifist creed. The often misquoted saying of its Founder, "*Think not that I am come to send peace on earth: I came not to send peace but a sword,*" had no application, as is obvious from its context, to the clash of armies in the battlefield. There have always been things worse, because more debasing to the character both of individuals and nations, than the material losses and the personal sufferings of the bloodiest of wars. But the whole hope of the future lies in convincing the judgment and conscience of the world that there is a practicable alternative to war which can secure satisfaction to the righteous demands of justice and honour, without resort to fratricide and rapine, to the depletion of the accumulated reserves of human effort and sacrifice, and to the sterilization of the seeds of future progress.

An association such as the League of Nations is not, and ought never to be, confined within sectarian boundaries. *Cuncti adsint*. But Christendom, which can be arraigned at the bar of history for the waging and fomenting of so many unrighteous wars, has a special responsibility of its own. There is a widespread and, so far as one can judge, a genuine anxiety among Christians to soften, and if it be possible to heal, what are called the "divisions of the body

CHAPTER XII

SOCIAL JUSTICE

BY THE REV. CANON C. E. RAVEN, D.D.

How the evils that attended the unnatural division of life into compartments, of drawing a hard and fast line between the sacred and the secular, gradually gave way to a widespread conviction that social justice is an essential element in the Christian ideal.

FROM the earliest age Christianity has inherited from its Founder a conviction that the love and service of God were inextricably bound up with love and service of His human family, that the ills of body and of estate were definitely hostile to the purpose of the Father and that the Kingdom of Heaven whose establishment was the goal of Christ's mission involved the full development, the physical as well as the spiritual healing of mankind. In a special sense the care of the outcast and the oppressed, the poor and suffering was the concern of the Church. The contrast both in aim and still more in achievement between the early Christians and their pagan neighbours is nowhere more plainly visible than in the sphere of humanitarian effort.

In the Middle Ages this tradition expressed itself not only in devoted service to the afflicted, but in a real and not unsuccessful effort to secure social justice, to prevent exploitation of the weak, to regulate the conditions and control the rewards of industry, to direct the relationships and emphasize the responsibilities of all classes in the community. The feudal system at its zenith was an attempt to order human society upon a Christian basis. However strongly we may criticize the moral failure of the hierarchy and the corruption of pre-Reformation churchmanship, the insistence upon the need for corporate righteousness and the efforts of multitudes of Christians to conform to its demands, are worthy of study and of admiration. We cannot re-establish the system on which that order was based; we must not forget or repudiate this aspect of our inheritance.

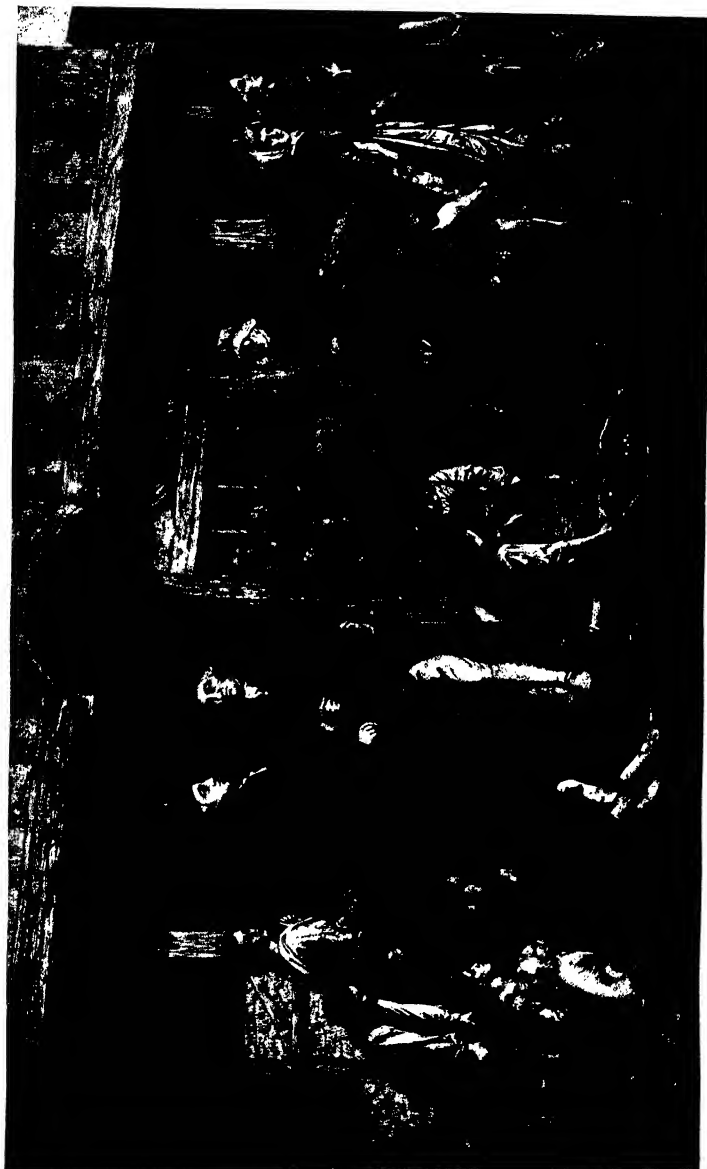
At the Reformation the religious changes of the time were accompanied by and to some extent reflected the rise of a new social order. Feudalism had collapsed, and for a time the ruins of it encumbered the earth. Relics of the old régime, in particular a strong belief in the value of religious uniformity and of a semi-feudal class system, have not yet wholly disappeared. But the belief in individual liberty, giving rise on one side to the movement for toleration, and on the other to the acquiescence in unrestricted competition, gradually demolished most of the ancient fabric, transforming what it did not destroy. Unhappily Liberty tended to overshadow the other two members of the democratic triad, Equality and Fraternity; and though these were never absent from the best minds, the concentration upon the rights of Man received a strongly individualistic meaning. When the industrial revolution altered the whole structure of Western civilization, the idea of social justice had been restricted to an insistence upon certain principles of personal morality; the attempt to enforce Christian standards in corporate life was abandoned implicitly by the mass of citizens and avowedly by their spokesmen, the advocates of *laissez faire*. In a previous chapter the general effects of this change have been briefly summarized and attention has been drawn to the reasons for the Church's failure to influence them. Here it may be well to treat certain aspects of this failure in greater detail.

Individual liberty and freedom of conscience had been won by slow degrees and at great cost; and in the early days of industrialism were still far from being attained. There were three spheres in which the individual might look for a greater measure of opportunity, those of religion, of politics and of economics—three spheres which were for the thinkers of the time too rigidly differentiated. In religion toleration and equality of treatment were obviously hard to oppose. Persecution and restrictive enactments had never been easy to justify, and were now, theoretically at least, out of fashion; for religion was regarded as essentially a matter of private concern and personal preference. If the individual were to be free anywhere, surely he must be free in the most intimate relationship of his life. The abolition of tests and the repeal of penal legislation were easily attained, though the abolition of privilege did not always or readily accompany them. In the other two spheres the reformers generally concentrated upon the former. Economics were little understood;

and where studied were regarded as a fixed science upon whose laws human effort could exert little influence, as a system of relationship governed by forces dimly understood but based upon the nature of the universe. Politics offered a much more attractive field, for as a safeguard against anarchy and upheaval, men looked to legal authority, to constitutions and statutes, with a reverence almost idolatrous in its profundity. The American Constitution, the Napoleonic Code, the labours of Bentham, and the universal political agitations are proof and symbol of the dominant passion. For the Christian "the powers that be are ordained of God" became his favourite text; as a rule he preferred to acquiesce in the mysterious dealing of this providential ordinance than to modify its operations by constitutional change. We can nowadays hardly credit the other-worldliness of the Church in those days, or realize how utterly Christians were afraid to realize or admit responsibility for social evil. To them such standards of life as made infant mortality and infant enslavement inevitable seemed part of the arrangements of a benevolent Creator. To challenge them was blasphemy; even for the victims they were less terrible than their sins justified; men must endure patiently what God had ordained, and in their patience possess their souls.

Christianity was "not eating and drinking, but love and peace and joy in the Holy Ghost," a truth indeed, but one scarcely fulfilled in the mines and factories of the "hungry forties," where love and joy and peace were as hard to find as daily bread. It is difficult for us who are reaping the harvest of those years of neglect to realize that William Wilberforce, the model of Christian piety and the emancipator of the slaves, was reckoned by Cobbett as the worst enemy of the people of England, or to credit Lord Shaftesbury's complaint that in his work he had hardly found a single minister of religion who would stand beside him on a platform. But such examples of the absence of any sense of social justice in the minds of Churchmen are typical of a time to which we cannot look back without shame.

It is not that there was any lack of humanitarian feeling among Christians. They shared, and indeed did very much to inspire, the general revolt against brutalizing pastimes and certain notable vices. They supported and insisted upon the virtues of beneficence and the effort to relieve the sufferings of individuals. Private charity



ROBERT RAIKES, THE FOUNDER OF SUNDAY SCHOOLS, AND THE HOUSE WHERE THE FIRST SUNDAY SCHOOL WAS HELD IN HARE LANE, GLOUCESTER (1780)



JOHN POUNDS' SCHOOL FOR RAGGED CHILDREN.

By EDWARD H. WEHNERT.

was at least as generous as it is to-day, and if in some cases tainted with patronage and complacency, in very many it sprang from a genuine interest and sense of responsibility. If there were hard taskmasters among the new owners of wealth, there were many who had a strong conviction of their stewardship, and who took a patriarchal, almost a paternal, interest in their workers. If they were blind to the injustice of the conditions of life and over-confident of the possibility of reform by self-help, at least their relations with those whom they employed were less remote and inhuman than in these days, and neither masters nor men were ever merely members of a class or cogs in the wheel of a machine. If wages were miserably small, hours intolerably long and conditions often outrageously inhuman, and if the acquiescence in economic necessity forbade any attempt to modify the working of free competition in such respects, at least there was opportunity for good men to alleviate and to some extent overcome the working of the conditions which they accepted. Individual justice could not fill the place of social justice and men were slow to discover its limitations; but our criticism of the old régime in industrialism must not lead us to the opposite and even more disastrous extreme which would reject all belief in individual effort and secure a soulless justice at the expense of destroying all the possibility of mercy.

The failure of Christians to recognize the problems of corporate life or to deal faithfully with those evils for which no one person is solely responsible had good grounds of excuse. Religious liberty had been won by individual protest and individual martyrdom. Humanity is fond of hero worship; and the achievements of a Luther or a Knox, of a Fox or a Wesley, or of any of those humble toilers whose biographies were catalogued by Samuel Smiles appealed to the emotions far more than the intangible and anonymous efforts of a multitude of people acting together. And individualism had great achievements to show in the physical realm. Pioneers, men of independent spirit, were discovering and developing fresh lands and new realms of knowledge: the absence of control gave large scope for personal achievement: if unrestricted enterprise sacrificed the weak it stimulated and rewarded the strong: what more natural than that men should reject all attempts to interfere with the rights of the individual, even if amongst them were the right to work sixteen hours a day in the mine and even the right to die by

starvation? When Malthus and afterwards Darwin pointed to the inevitability of struggle, Christians might well argue that the victims in life's battle were only fulfilling the law of sacrifice.

Moreover, any concern with economic laws, even if it were not a futile battling against an iron necessity, against conditions inherent in the very nature of things, might well seem to be for the Christian a distraction from his central interest. He was concerned primarily with the spiritual, with men's souls rather than their bodies, with their eternal welfare more than their temporal circumstances. The believer could triumph over his environment: poverty and squalor, disease and discomfort, what were these but the trials of the saint, the conditions which he might turn into opportunities of grace, the temptations which should discipline him to perfection? It was not difficult to prove that Christ and His disciples had cared much for individual consecration, little for material comfort or social reform. The very texts which point the way to a true, because God-grounded, social order might be interpreted to advocate other-worldliness and passivity. "Who made me a judge or divider over you?" was surely a refusal to be concerned with matters like wages and hours. If the Son of Man had not where to lay His head, why should His followers trouble about housing problems or slums? Let them by all means preach the Gospel to the poor: the Gospel as interpreted in the "forties" was concerned with heaven not with earth, with God not with practical affairs. In the interest of spiritual excellence, it was surely well to draw a hard and fast line between religion and politics, between the sacred and the secular. The line was drawn, clear and precise.

But such an unnatural division of life into compartments could not long endure without protest. Individuals are not in fact isolated units: every man "in his time plays many parts." He is a child of God: that is his first and universal calling. But he must fulfil the conditions of his Sonship as husband and father, as worker and breadwinner, as neighbour and citizen; and in all these functions the same divine ideal must find expression. Moreover, both within and outside the Church, conditions were coming into existence which shocked the consciences of the observant. It could not be God's will that men should live and die herded together in houses utterly insanitary and too crowded for privacy or decency, that children before they had known anything of the joy of youth, should



be driven to listless slavery, that women should be forced to starvation or prostitution by the horrors of sweated labour. "The cry of the Children" and the "Song of the Shirt" could not be long shut out. "Alton Locke" might be castigated by the quarterlies; it was read and re-read by multitudes. Men's hearts may be hard and their imaginations dull, and their brains quick to invent excuses, while their bodily comforts are easily supplied. But there were masses to whom the policy of *laissez faire* stood condemned by its fruits, and who could not rest in acquiescence.

And so a great revival, not only of humanitarian activity, but of social interest set in; and in the middle of the nineteenth century men began to arraign not the shortcomings of the individual, but the whole ordering of corporate life. The efforts of prophets like Carlyle, of business men like Robert Owen, of reformers like Cobbett, of humble mechanics like the Chartists began to produce results. If political activity was the most obvious field, the overthrow of the "iron law" of wages and the breakdown of the old economics opened up a new area for inquiry and investigation. On all sides critics of the established order were heard—amongst them small groups of open-minded Christians, who were prepared, just because they maintained the supremacy of the spiritual, to insist that no human interest could be outside the scope of their religion. Social justice became more and more the object of man's quest.

That the Church still in large measure stood apart from such an objective seems perhaps more strange than it is in reality. The Catholics were deeply involved in hostility to those democratic and revolutionary movements which on the Continent of Europe had taken an anti-clerical bias. The Reformed Churches, partly through fear of revolution, partly through concentration upon individuals, partly owing to the association between the Church and the existing social order, were almost equally prejudiced. Many of the most ardent reformers were men who, in the existing uncertainty as to the historical and doctrinal validity of Christianity, found a substitute for religion in socialistic or humanitarian movements. Karl Marx was as events have proved not less truly than Auguste Comte, the founder of a new cult. The alliance between Christian orthodoxy and reactionary politics against liberalism and atheism, which has been so general in Roman Catholic countries, was obviously tempting at a time when Church and King, the Bible and the Throne

seemed to stand or fall together. Social justice and an interest in social problems seemed to many to mean socialism and to imply unbelief. Let Christians cling to their work for the conversion of individuals: if this were faithfully fulfilled, social reconstruction would follow in due course.

The situation thus created is indeed one of the gravest perils of the time. Humanitarianism in its fullest sense is an essential element in Christ's Gospel: it is only in love of the brethren that love of God can find on earth its adequate expression; and if history proves anything it proves that, while Christianity must express itself in the struggle for Social justice, humanitarians cannot fulfil their task worthily unless they are animated by Christian standards and impelled by the dynamic of religion. For man is not merely a creature with material needs: social justice, the right ordering of human relationship, cannot be achieved merely by redistributing wealth, or readjusting wages, or reforming conditions of labour, or reconstructing the social order. Man does not live by bread alone; the life of the fatted calf is not an attractive ideal; and unless the deepest longings of the heart, the longing for a worthy ideal, for eternity, for God, can be satisfied, physical comfort may well prove rather a curse than a blessing. Nor, if the evidence of the past and the experience of the present are a guide, can the passion for social justice supply a stimulus of sufficient power to overcome the inherited acquisitiveness and ingrained egoism of human nature. It is significant that Comtism has died without issue or much mourning: and that Marxism like Mohammedanism lives by the appeal to war. Jesus when He had shown to His followers the vision of the Kingdom set Himself to liberate in them the power to realize their ideal by cultivating their apprehension and knowledge of God, by insisting upon spiritual sensitiveness and a brotherhood based upon their relation to a common Father.

That the evils of this divorce between religion and social passion were being widely recognized before the close of the nineteenth century, is manifest from the history of Christian movements for reform in most civilized countries and from the general recognition that economic and political problems have always their moral aspect and that in many cases this aspect is of predominant importance. So long as such problems could be treated in the abstract as if concerned with immutable principles, they could legitimately be

separated from religion. Once admit that the economic or political man is a generalization and a myth, that human nature is not a substance of known and unalterable content, that the motives and capabilities of men cannot be treated as fixed, and the attempt to prevent Christians as such from scrutinizing and condemning industrial and national affairs breaks down. In fact during the past seventy-five years the whole area of social relationships has been more and more freely surveyed from the standpoint of the Christian ethic; and while at first particular evils like drink, gambling and prostitution were almost the only matters under consideration, a scientific study of them plainly revealed that their origin was largely due to the conditions of life, the housing, amusements, wages and education of the people. Recently the attempt has been not so much to deal with special problems independently, as to try to evaluate the present order by comparing it with those standards of life which Christ summed up in His phrase the Kingdom of God, and then, having defined the goal to which reform should be directed, to formulate such practical steps as could reasonably be taken toward it.

In the light of the Master's teaching on the sanctity of personality, on the relative value of persons and of property, on the duty of Service, on the perils of wealth, on the care of the afflicted, on the treatment of offenders, and on the sovereignty of love, it is obvious that the social order of our industrial civilization stands condemned. So far any thoughtful Christian will find himself at one with the most revolutionary of reformers. Where he will differ is not in the diagnosis of the disease so much as in the method of its cure. He cannot be satisfied with a mere overhauling and readjustment of the system whether radical or palliative: for while recognizing the importance of environment he cannot regard human beings as no more than the sport of circumstance. Rather he will insist that only by emphasis upon the spiritual can the material be rightly ordered and used, that only as men individually and corporately "seek God's Kingdom and Righteousness" will the social justice for which Christian and non-Christian alike are eager be successfully and permanently achieved.

At present men and women of goodwill, the world over, are striving from their several standpoints to build a City of humanity; while they disagree upon or refuse to discuss its ground-plan, lay-out

and design, such progress as is made is woefully incongruous and incoherent. The Church, if it examines and proclaims faithfully God's will for His children as revealed in Christ, ought to be able to supply the function of surveyor and architect. It is not enough for her to condemn, and then suffer the rebuilding to be done at haphazard. If she is true to her heritage, she should be able not only to guide the builders, but to inspire them, to disclose not only the practicable programme for reform but the passionate zeal which can carry it to fulfilment.

By the beginning of the nineteenth century it was becoming evident that such a vision of her task had already dawned upon the leaders of the Church's thought both in Europe and in America. In Roman Catholic countries the alignment of parties which identified Christianity with conservatism and support of the monarchy, and free thinking with emancipation from the claims of the Church had become fixed. Roman Catholics, by insisting on the absolute authority of the hierarchy, were at least as largely responsible for such a cleavage as their opponents. But among the heirs of the Reformation St. Paul's antithesis of "Law" and "Grace" has always been an abiding possession: if it has often fostered sectarianism, it has also stimulated progress and experiment. The Christian Socialist is still a prodigy in Belgium and a rarity in France: in Britain and the United States he has been familiar for half a century, and has succeeded, not indeed in converting his fellows to a general acceptance of a socialistic interpretation of the Kingdom of God, but to a widespread conviction that social justice is an essential element in the Christian ideal.

If "slumming" became the fashionable virtue (or was it vice?) of the eighties, such detached and casual efforts speedily gave place to a more intelligent sympathy, to an earnest desire to deal not with individual hardship only, but with its underlying causes, to minister justice as well as charity, to challenge the whole basis of an order in which both the perils of great wealth and the miseries of abject poverty violated the ethical teaching of Christ and obstructed the influence of His Spirit. Studies like those promoted by the Christian Social Union, sermons like those of Scott Holland and Bishop Gore, settlements like Toynbee Hall, appealed to consciences already stirred by the work of novelists and politicians, and compelled their owners to realize that problems of housing and wages, indus-

trial organization, financial control and national government were fruitful fields for Christian exploration and enterprise.

Here at home in the conflict with conditions which had been allowed to develop almost without protest and whose character was now startlingly revealed was an incentive to Christian heroism such as had hitherto been found either in the quest for the bliss of Paradise or in the ardours of foreign missionary effort. Here was a motive which could restore to the Church the romance of living dangerously, the intellectual appeal of a new Reformation, the practical outlet of a great Crusade. It is no accident that the passion for social justice has been accompanied by a theology which has recovered the sense of wonder and of adventure, of Apocalyptic vision and Apostolic audacity, and an evangelism which emphasizes service as the realizing of salvation, and preaches the Cross not as the symbol of a past triumph alone, but as the hallmark of present discipleship.

CHAPTER XIII

THE PROBLEM OF EDUCATION

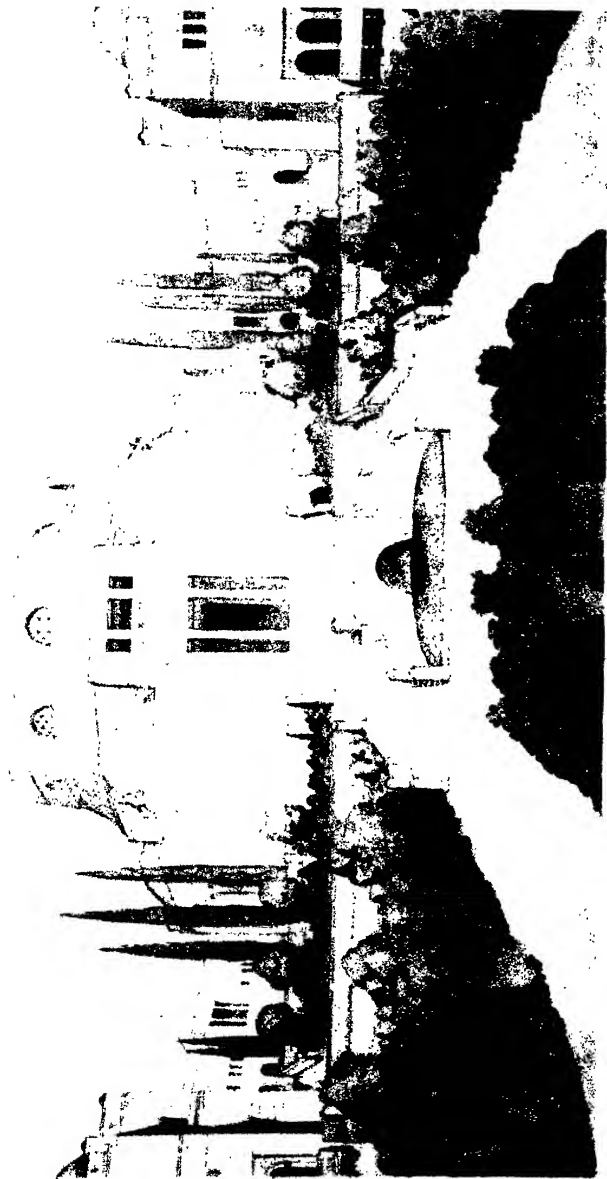
BY THE REV. PROF. WILLIAM ADAMS BROWN, D.D., PH.D.

Pedagogy, the science of education, has had its share in the transformations that have taken place in the other sciences. For education is no longer the privilege of the few but an obligation imposed on all citizens. Consequently a large part of the responsibility for training youth has been shifting from the Churches to State-controlled or privately endowed schools and universities, a process carrying with it secularization of the educational system.

AMONG the influences which determine the character of a civilization education holds a foremost place. While all the factors which go to make up the common life affect the rising generation to a greater or less degree, our schools and colleges do so consciously and of set purpose. In its system of education each generation gathers up the values which it deems most important and seeks to transmit them to the generation that is to follow it. It becomes important, therefore, to inquire how far modern education, so far as it differs from education in earlier times and under other types of civilization, has been shaped by Christian influence and is responsive to Christian ideals.

At the outset we are embarrassed by the ambiguity of the terms we must use. Thus we may think of education narrowly or broadly, either as a set of subjects to be taught in schools or as a complex set of influences by which motives and ideals are formed and the individual is fitted for life. Christianity in like manner may be regarded either as the type of religion taught and exemplified in the various branches of the organized Church, or as the entire stream of influence set in motion by the impact of the life of Christ upon the world, manifesting itself outside as well as inside of the Church, and in criticism of existing church methods and tenets, as well as in promotion of them.

In what follows we shall adopt the more comprehensive point of



THE NEW UNIVERSITY, JERUSALEM.
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view. Education will mean for us the total stream of influences which aim consciously to shape men's beliefs and conduct; and Christianity, the sum total of the influences which owe their origin to the historic movement which bears that name. Against this broad background we shall try to sketch briefly the relation between the organized Church as a teaching body and the system of ideals, methods and institutions which together go to make up what we call our educational system.

A notable feature of modern education is the shifting of responsibility for the training of youth from the Church to the State and the privately endowed school and university. This transfer of responsibility is, to be sure, not yet complete. Protestants as well as Roman Catholics still maintain important educational institutions, both of an elementary and of an advanced character, which are ecclesiastically controlled. Nevertheless, it is true that, taking modern education as a whole, the tendency has been increasingly to make the school independent of the Church.

The effect of this change can be better appreciated in the light of a brief historical review. In the Middle Ages all education—with negligible exceptions—was in the hands of the Church. The teachers in the elementary schools were clerics and the great universities like Oxford and Paris were ecclesiastical foundations whose most famous teachers belonged to the religious orders. During the devastation caused by the barbarian invasions the monks kept alive the tradition of learning, and when contact with Arabic civilization restored to Europe an acquaintance with the lost writings of Aristotle, it was the friars who appropriated the new knowledge and adapted it to the defence of the Christian tradition. The history of intellectual life in Europe from the eleventh to the sixteenth century was the history of the scholastic philosophy. It was a friar—Roger Bacon—with whom the history of physical science began, and the great humanists to whom we owe the Renaissance were either themselves ecclesiastics or owed their patronage to the Church.

All this was changed by the Reformation. With the emergence of the new national Churches the unity of the educational system was broken for the first time in a thousand years and the process of secularization began.

At first, to be sure, the significance of the change was not

apparent. In their intellectual background the reformers, whether German, French, Swiss or English, were children of the Church, and their ideal for education was not only religious through and through, but in all that affected social and individual morals contemplated control by the Church.

The method of control differed in different countries. In Germany and England, where nationalistic influences were strong, the State stepped into the place of the Church as the guardian of education, but it was a State professedly Christian and therefore definitely committed to the teaching of religion. In Geneva and in Scotland, for a time at least, the ideal was theocratic and the Reformed Church assumed the place as guardian of religion and morals from which the old Church had been dethroned. Even in Puritan America theocratic ideals long prevailed. The early colleges were founded primarily for the education of ministers, and the early academies included in their instruction training in the catechism.

None the less it is true that in breaking with Rome the Reformation set in motion influences destined to have a profound effect upon educational ideals. In breaking down the sharp line of demarcation between priesthood and laity and claiming for the latter a share in the priestly office, the Reformers struck a fatal blow at the conception of education as the peculiar prerogative of the clergy. In emphasizing the right of private judgment, and insisting that each believer should have direct access to the original source of revelation in the Bible, they put a premium upon the education of the laity—an ideal which for the first time was made possible by the invention of printing. The printing press put the tools of education into the hands of the common people and made the Bible an accessible book for all. The full consequences of the new ideal were not at once perceived, but its logic was irresistible and in due time worked out its inevitable conclusions.

To follow the steps of the process of secularization in detail would be out of place here. The story differs in different countries and is complicated by the play of other influences, to some of which we shall presently refer. Here it is enough to note that whereas at the Reformation education was all but completely in the hands of the Church, now the Church shares the responsibility for training the child with the State and with the privately supported school and

university. In France public education has long been divorced from ecclesiastical control and the same has been true in Italy since the abolition of the temporal power of the Papacy. In Germany both elementary and higher education are supported by the State. In England the abolition of religious tests in Oxford and Cambridge marks the end of the older system, while the new universities, like London, Sheffield and Manchester, have been secular from the first.

This does not mean that the teaching of religion has been banished from the schools. On the contrary, provision is made for such teaching in most countries. In Germany elementary instruction in religion was required until the foundation of the Republic and the universities still maintain faculties of theology both Protestant and Catholic. In France the teaching of religion has been banished from the elementary schools but continues in the universities. In Great Britain the new Education Act provides for elementary religious education while the more important universities have faculties of theology. It has remained for the United States to carry the divorce of Church and State to its logical conclusion, and, in all but a few exceptional cases, to banish the teaching of religion not only from elementary and high schools but from tax supported universities as well.

A second influence of far-reaching importance has been the rise of political democracy. The story of the spread of democratic ideals has been told elsewhere and need not be retold here. It is sufficient to say that with the increasing extension of the suffrage in every country in Europe has come as an inevitable corollary an extension of educational privileges and the most recent step in political democracy, the granting of the vote to women, has already had as its natural concomitant a corresponding extension to them of educational facilities.

This change has affected the educational system in two ways. In the first place, it has vastly increased the number of candidates for education. So long as power remained in the hands of the few the many might be allowed to remain in ignorance, but when the great body of citizens gained the right to vote it became an obvious duty of the State to see that they had the education which would fit them to vote intelligently.

In the second place, the growth of democratic ideals has enlarged

the range of subjects with which the schools are concerned. The "three R's" are seen to be no longer sufficient. Since the boys and girls whom we must train are to be our future citizens they need to know the nature of our institutions and the history which lies back of them. Since they must earn their own living so as not to be a burden to the State, vocational training becomes a large issue in educational circles.

Religious as well as political influences have had a part in bringing about this expansion of educational programme. An inevitable result of the consistent application of the Protestant principle was, as we have seen, an enlarged estimate of the capacity of the individual. Roman Catholicism—instructed by many centuries of practical experience—has always insisted upon the fact of inherent differences of capacity and has made this the foundation of its educational philosophy. To the few the Church has opened the door of knowledge wide and let them roam where they willed; for the many it has made authority the basis of its educational system and provided through the machinery of the Church a convenient, if rough and ready, way of deciding between the legitimate and the illegitimate. Protestantism, insisting on the equality of all believers before God, has thrown upon the many the responsibility of ultimate decisions in matters of the highest moment, and in so doing has made universal education a necessity.

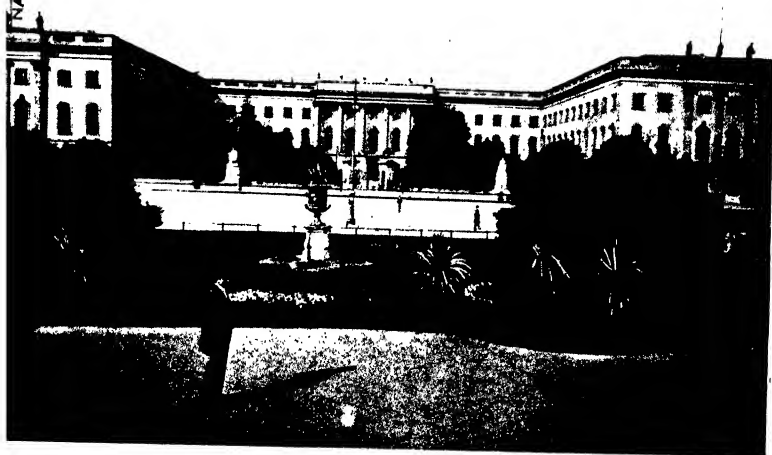
With the increase in the number of candidates for education and the addition of new subjects of study have come other changes in the educational ideal. Where the older system contemplated a fixed curriculum through which all pupils were to be put, the modern educational ideal is increasingly flexible, taking account not only of the different objects for which the pupil needs to be trained, but also of the different interest and appreciation which he brings with him. Compare the curriculum of one of the older English or American universities like Oxford or Harvard a hundred years ago with the offerings which face the bewildered student to-day. Compare the German university of Luther's time with Berlin or Leipsic to-day, or the university of Paris when Calvin studied there with the present offerings of the Sorbonne, and you gain some indication of the change which has taken place in the last two generations and which presents new and untried problems to the religious teacher.



THE SORBONNE, PARIS, SHOWING THE NEW BUILDING AND THE TOWER OF THE OBSERVATORY.



LEIPZIG UNIVERSITY.



BERLIN UNIVERSITY.

Underlying the change and in part accounting for it has come a momentous change in educational philosophy. Where our fathers thought of human nature as essentially corrupt and tried by discipline to subdue it to its God, appointed duties, modern education assumes that human nature is if not essentially good at least morally neutral and aims to release its undiscovered possibilities. The reasons for the change of view have been given elsewhere in connexion with the history of philosophical thought. Here we are concerned only with its influence upon educational theory. This in all conscience is revolutionary enough. It means the association with the principle of duty of the principle of interest. The modern teacher believes that if you appeal to the best in the child he will meet you more than half way. He questions the wisdom of the disciplinary methods used by the older schoolmasters. He sees educational values in the play impulse and tries to make study as pleasant as possible. In elementary education this new approach has given us the kindergarten; for more advanced pupils a freer range of choice in the subjects studied and a more consistent use of the method of experiment. Lectures by professors are replaced by group discussions of the class. Where the older teacher began by the systematic analysis of the whole field to be covered, the modern teacher leads up to his conclusions through the study of selected cases by individuals. Whether the change marks a permanent policy by which future education is to be guided or only the swinging back of the pendulum which had swung too far the other way, we do not here inquire. Here it is enough to register the fact and to note the problem which it raises for the teacher of religion.

Two more influences require brief mention before our picture of the modern educational system is complete. One is the extent to which it is dominated by the method and ideals of the physical sciences; the other is the increasing tendency to measure the teacher's success by pragmatic tests.

Of the first of these we can speak briefly, not because it is not important, but because its importance is so generally recognized. These volumes have elsewhere recorded the rise of modern science and recalled its marvellous triumphs both in the realm of theory and of practice. It was inevitable that an influence so momentous should exercise a far-reaching effect upon educational method.

And this in two ways: partly by introducing new subjects of study; partly by modifying the way in which the older subjects of study were approached.

The outstanding fact of recent educational theory is the increasingly large space given to the physical sciences. Both in the high school and in the university they are claiming space formerly given to the humanities and crowding the latter into even narrower compass. In the pressure of time needed for physics and chemistry, not to speak of biology and physiology, language is hard put to it to find a place in the curriculum, and for many students—even those of first-rate ability, the classics have gone, if not for ever, at least for the time being.

Even more important than the change in subject matter is the new spirit which science brings with it. It is the spirit of criticism: open-minded in its approach to truth, distrustful of authority, eager for new experiments. This spirit has revolutionized our attitude to physical nature. The methods to which it has given birth have put into our hands power undreamed of by our fathers. It was inevitable, therefore, that the same methods should be applied in other fields as well. So we see history being rewritten in the light of the new knowledge, and not secular history only, but religious history as well. Bible and Church are made the subject of critical analysis and traditions long accepted without question are challenged. Where the new spirit obtains the teaching of religion in our schools and colleges becomes a problem. Beliefs which lay at the foundation of the older educational system can no longer be accepted without question, and the whole problem of the teaching of religion, both in its more elementary and in its more advanced form, has entered upon a new phase.

Latest of all the claimants for the attention of the modern student comes psychology, with its sister sociology. The teacher of to-day, as we have seen, no longer accepts without question the picture of human nature handed down by the fathers. He is studying human nature as he finds it—in himself and in the children he teaches—in order to discover its laws and to adapt himself to what he finds. The dogmatic view of human nature as unchangeable is being replaced by a more flexible view. Human nature, so the psychologists tell us, is changing, not in the constituents of which it is composed or in the powers it commands, but in its habits of

action and standards of judgment. The question is how this change shall take place, whether haphazard as chance may dictate or the whim of the moment decide, or according to an intelligent plan determined by a study of the environment in which we are placed, the ideal we set ourselves and the powers we command.

And this brings us to the last of the characteristics of modern education which we shall have space to mention: its pragmatic character, or, in other words, its attempt to bring all its ideals and theories to the test of practical experiment.

This change is in part the result of the scientific movement of which we have just been speaking; in part of a changed educational ideal. The older teacher conceived his work primarily as the imparting of knowledge. The teacher of to-day regards his duty as fitting human beings to live.

There is a sense indeed in which all education may be considered as fitting men for life. The reason why the particular subjects required in the older curriculum were studied rather than others was because it was believed they would fit the student for success in his profession. The minister needed Hebrew and Greek to interpret the Bible, and the lawyer to know Roman law in order to understand the origin of the law of to-day. But the teacher's duty was not primarily to show the student the application of what he was studying, but to teach him the facts, which later he could apply for himself. The modern teacher questions the usefulness of knowledge which is unrelated to practice. He tries to put all he teaches in a practical context. The ideal school (according to the latest educational theory) should be a miniature of life, dealing in principle with all the kinds of interests which will confront the student in his later experience and forcing him at every point to put his theories to the test of experience. School becomes a place in which projects are proposed for solution, and the case system replaces recitations or lectures in the university.

Here again we are not concerned with the educational soundness of the new method, but simply with its effect upon the teaching of religion. One obvious effect has been to increase the difficulty under which the religious teacher labours in a country like the United States where no provision is made for the teaching of religion in the public schools. As long as the duty of the school was conceived primarily as the imparting of a body of knowledge,

the absence of religious teaching, while regrettable, was not fatal, for the lack might be supplied by the teaching of Sunday school and Church. But when the school aims to be a miniature of life, and makes moral training a definite part of its aim, the absence of all reference to religion becomes more serious. The more efficient and attractive the public schools become, the more difficult it will be to persuade children that a subject which finds no place in the school's philosophy of life can be as important as the Churches assume. This difficulty is being recognized not only by the representatives of the Churches, but by secular leaders like our judges and charity workers, and the problem how to retain the religious sanction for public morals in the free democratic State of the future is increasingly engaging the attention of thoughtful people.

Such in briefest outline is the educational system with which the religious teacher finds himself confronted to-day and through which he must hand down to the new generation the ideals and values which have come to us through historic Christianity. In countries like Great Britain, where the population is relatively homogeneous and public opinion approves the action of the State in making provision for the elementary teaching of religion, the State must share with the Church the responsibility for finding the satisfactory solution. But in a country like the United States where the people are of very different racial as well as religious antecedents and the State guarantees complete religious liberty, it is clear that the Church must assume responsibility for whatever formal teaching of religion there may be. The only question is whether this shall be done in a purely independent fashion or through some system of co-operation in which the goodwill of the public-school authorities is enlisted.

It would be a mistake no doubt to exaggerate the effect of formal religious teaching and to overlook the fact that in more personal ways our schools are in fact channels of Christian influence. Many teachers both in our elementary and in our more advanced schools are themselves Christian men and women. Where this is the case the unfortunate effects of the present system, while not removed, are minimized. There are other ways of exerting influence beside formal teaching, and a school in which pupils come from Christian homes and teachers are members of Christian Churches will be a school in which Christian influence is bound to make itself felt.

The difficulty becomes acute, however, in those cases where both pupil and teacher have only nominal contact with organized religion and there is no home or Church influence to supplement the lack of school instruction. Here the Church must assume active leadership if the present deplorable breach is to be healed.

Two different methods may be followed. In the first the Church assumes full responsibility for secular as well as for religious education by maintaining a system of schools which duplicate the public school at all points (the so-called parochial school). In the second provision is made for special religious instruction by duly qualified teachers at hours left open by the public schools. The number of different Protestant denominations and the lack of provision in most of them for any effective system of week-day religious education has made it difficult to work out any effective plan of co-operation with the school authorities—a difficulty which the Roman Catholic does not feel to the same extent. The State can deal with large units like Protestants, Catholics and Jews, but not with Presbyterians, Baptists, Episcopalians, etc. Obviously, therefore, if the needed religious instruction is to be provided on any effective scale there must be greater co-operation between Protestant bodies than is now the case.

Hitherto the chief agency through which the Protestant Churches have provided for the religious training of their children in those countries in which it is not cared for by the State has been the Sunday school. With full recognition of the great service which the Sunday school has rendered and the distinct step forward which it represents, it remains true that measured by any sound educational ideal it falls far short of what needs to be done. A school that meets its pupils only once a week for a brief hour and relies for its instruction upon the services of volunteer and often ill-trained teachers is at an obvious disadvantage compared with the day schools to which the children go during the week which can not but have disastrous results for the cause of religion. The need of improvement in this respect is generally recognized and much intelligent work is being done with gratifying results, but the task is so great that no denomination can successfully cope with it alone. Only a Church with a nation-wide educational programme can deal adequately with so complex a situation. Hence the movement for Christian unity which has already made

so promising a beginning is of exceptional interest for the student of Christian education.

A serious obstacle in the way of bringing about the needed co-operation is the difference of theological conviction. The denominational differences to which reference has already been made are not merely survivals of outworn traditions. In part they represent real differences of conviction, many of them of permanent character; while across these older differences and giving them new intensity and significance is the difference between those who accept wholeheartedly the modern scientific approach to education and those who believe that in religion we deal with a subject to which the methods we use in studying other fields of knowledge do not apply. This contrast meets us in all of the Churches. Even the Roman Catholic Church has not been unaffected by it. Indeed the word Modernist passed over to Protestantism from Roman Catholic circles. In Protestantism the controversy between those who accept the modern view of the Bible as a book which has grown up gradually in history and is to be interpreted by the method we apply to the study of other human literature, and those who still regard it as a literally inerrant book, renders effective co-operation in any large scheme of religious education for the moment impracticable.

The difficulty is accentuated when we pass from elementary education to the more advanced students in our universities and colleges. In these institutions the methods of modern science dominate the instruction in all departments and if religion is to be included in the curriculum it must be studied in this way or not at all. But it is not easy to do this without creating prejudice on the part of those who have not adjusted themselves to the new situation. This difficulty helps to explain why the subject of religion has hitherto been so inadequately dealt with in our American colleges and universities.

Fortunately there are signs that the situation is changing for the better. Thoughtful people everywhere are beginning to recognize that a factor which has played as great a role in human history as religion must be a part of every liberal education, and the university which makes no adequate provision for its study writes its own condemnation. The Churches on their part are beginning to recognize that public education has come to stay

and that it is better to co-operate with the State-controlled institutions than to oppose them. So various schemes of co-operation are being worked out between the churches and the universities in which provision may be made for the teaching of religion by voluntary agencies which provide courses for which the universities give credit, which in some cases give promise of developing into full-fledged schools of religion. The experiment is still in its infancy, but it is full of promise for the future.

One important field in which the Churches are making their influence increasingly felt is that of public opinion. We are only beginning to realize how important an influence is exerted by the opinion of the circles in which we move—an influence all the more powerful because indirect and often unnoticed. In such matters as race and class, war and peace, national policy and industrial standards, sentiment plays a powerful role, and with our better understanding of psychological laws the forces which we deliberately employ to influence public opinion in the interest of some private end are constantly multiplying. Business agencies have their press agents and labour unions as well. Political parties win their votes through propaganda and compete for the control of the public press. Here is a field in which the Churches have a direct interest and in which—if properly organized—they can exert a powerful influence. Through agencies such as the Federal Council of Churches and the National Catholic Welfare Council in the United States and similar bodies in other countries, they are beginning to study contemporary social issues and when the occasion seems to warrant it, to make pronouncements on questions of the day. In matters of social welfare and industrial justice their influence is already recognized as a factor of no mean importance. More recently they have entered the international field and through agencies such as the World Alliance for International Friendship and the Federal Council's Commission on International Justice and Good Will, are arousing Christian people everywhere to their responsibility for the promotion of world peace.

One significant factor in the situation still remains to be mentioned. In all the countries of which we have hitherto spoken the relation between Church and State if not actively friendly is at least neutral. The State may not directly concern itself with religion, but it grants the Church freedom to teach and believe as it pleases.

There is, however, one conspicuous exception to this general principle. In Russia, for reasons too complicated to be discussed here, the existing Soviet government has not only dissolved the former alliance between State and Church, but it has gone further and prohibited the teaching of religion in any form to children under sixteen years. What the outcome of this new experiment will be it is too soon to say. Whether the Soviets (like Comte two generations ago) having broken with the religion of the past will be obliged to create a new religion to satisfy the religious instinct of man; whether the ties which attach the Russian people to the Church of their fathers will prove so strong that the government will be forced to make terms with the Church; or whether the difficulty will be resolved by a change of government in which the policy hitherto pursued will be definitely abandoned, it is too soon to say. Of one thing, however, we may be sure, that the experience through which the Russian people are passing to-day is destined to have momentous consequences for the student of religious education and to provide new data of which all who are responsible for leadership in this difficult field will be wise to take note.

We have considered ways in which the Churches are adapting themselves to the new influences which are operative in the field of education. It remains to ask in conclusion, what is the contribution of the modern educational system to religion? How far is this system as a whole responsive to Christian influence? How far may the motives to which it appeals and ideals by which it is inspired be rightfully called Christian?

At three points the ideals which inspire modern education appeal to motives which are characteristically Christian. The first point is the democratic character of contemporary education, or in other words, its consciousness of the independent value and capacity of each individual. The second is its optimistic character, or in other words, its faith that the individual is not only worth developing but that he is capable of development if the right motives are appealed to and the right influences used. The third is its pragmatic character—its constant appeal to practice as the final test and to experiment as the gate of knowledge. In all these modern education is walking along paths which have long been trodden by the feet of Christian teachers.

The first contribution of modern education to the Christian view

of life is its rediscovery of the value of the child. In the child the modern teacher sees a reservoir of undeveloped possibilities and he believes that every child is entitled to have these possibilities developed up to the limit of his capacity.

It is quite true that this faith is expressed and justified in a way different from that in which it has often been expressed and justified in the past. In the past the individual has too often been isolated from his environment and given a value independent of the society of which he is a member. The aim of the Church has been to save the individual from the world, not to save the world through saving the individuals who are in it. The modern educator recognizes the dependence of the individual upon his environment, not only past but present. He recognizes that personality and society are correlative terms and that the individual is made by the community as certainly as he contributes to its making. His interest in helping boys and girls to make the best of themselves is that in this way they may make their best contribute to society as a whole and promote those ideals of justice, brotherhood and faith by which nations as well as individuals live. But in this he is rediscovering an older Christian ideal. To Jesus the individual had value indeed—an infinite value as a child of God destined for immortality—but the individual was never an isolated individual, realizing himself apart from others, but one of many brothers destined to share in the common life of the Kingdom of God. In reminding us of the indissoluble connexion between the individual and society modern education is rediscovering an early Christian ideal.

The second contribution of modern education to the Christian view of life is its faith that the individual is not only worth developing, but that he is capable of development if the right motives are appealed to and the right influences used. Here again the modern teacher reaffirms a truth on which Christian preachers have never been weary of insisting. Christianity began as a gospel of salvation. Jesus consorted with the outcasts of His people and declared that He came to seek and to save that which was lost. In every age Christians have concerned themselves with that section of society which others had dismissed as hopeless, and some of the greatest Christians have been drawn from an environment which the educators of their day had regarded as negligible as a recruiting ground.

Here again the philosophy which underlies the modern educator's

belief differs from that of the old-time Christian. The former holds an optimistic view of human nature; the latter had a pessimistic view. The modern teacher sees in human nature a reservoir of undiscovered good, and seeks to draw out what is already there. The old-time Christian saw in human nature a slave to evil of every kind and relied for his hope of deliverance upon supernatural influence. The significant thing is that in spite of the obstacles to be overcome he believed that deliverance was possible and gave himself without reserve to the task. Modern philosophy, with the emphasis upon the divine Immanence, has removed some of the difficulties felt by the older theologian. In addition, psychology has put into the hands of the teacher of to-day a knowledge of the laws of human nature which his predecessor did not command, and enables him to deal intelligently with defects, both of mind and body, with which the latter was powerless to cope.

The third point of contact between modern educational theory and the Christian view of life is its pragmatic character. The modern teacher is interested in theory, not for its own sake, but because of what it can do to promote a more efficient life, and in this he finds himself in hearty accord with the great Christian teachers of the past.

It is true that the philosophy by which the attitude is justified is not always the same. Many modern educators are relativists in their conception of the universe. They are sceptical as to their ability to grasp ultimate reality and are content to take short looks. Thought, they tell us, is instrumental. It comes to its own by helping us to find our way through concrete situations which in turn are followed by others to be dealt with in the same way. For eternal and immutable principles once for all revealed, their philosophy makes little place. Yet even from pragmatic principles there is more to be said for the attitude of the older Christians than our contemporary pragmatists have yet discovered. To them religion was nothing if not the self-revelation of the eternal in time. God was the infinitely perfect who in immediate revelation made His presence felt to His worshipper. But their test of this revelation was not theoretical, but practical, and the final ground for believing that in religion they were dealing with the infinite God and not simply with their own subjective impressions and sensations was the persistence from generation to generation of a satisfaction which released new energies and put all life in a new perspective.

It is at this point that the Christian teacher is inclined to question whether modern educational theory has yet made place for all the values which were included in the older religion. There are values of different kinds: the values of motion and the values of rest; the values of inspiration, but also and no less, the values of appreciation. The same Bible which reports God as saying to His servant Moses, "Why callest thou to Me? Speak to the children of Israel that they go forward," records another saying of the Almighty, "Be still, and know that I am God." There are secrets of the inner life which can only be mastered in solitude. For the cultivation of these our modern education has hitherto made scant provision. There are signs, however, that the tide is turning. The revived interest in mysticism on the part of psychologists like William James would seem to show that the contemplative side of religion is coming to its own again; and when this good time comes we may hope for a broader psychological foundation on which to base our teaching of religion.

A second query has to do with the estimate of human nature. Granting that our fathers painted the picture of man's moral state too black, is it not possible that we have gone to the other extreme and taken too little account of the baser elements in human nature? However it has come about, sin is still a factor to be reckoned with and where it has assumed its grosser forms in hypocrisy and self-indulgence, conversion is still the remedy that seems to be requisite.

One may question too whether the modern educator's appeal to interest has not been overdone. When all has been said of the faults of the older system, it cannot be denied that it turned out disciplined characters and made great scholars. But discipline in our modern education is all but a lost art. To do the thing that is uninteresting at the time with all one's might because it is the thing that ought to be done, may prove to have by-products of sound educational value. Judged by the pragmatic test it has much to say for itself. Ramsay MacDonald's tribute to his old dominie is typical of what many a Scotch boy who has made good would say of his schoolmaster: "He made me study one subject until I had mastered it, for he said, 'You must master; that is education. When you have mastered one thing, you are well on your way to mastering all things.'"

One characteristic of the new education modern Christians would

not willingly let go and that is the atmosphere of freedom in which it is carried on. If the Church as an institution has lost its right to control education by authority, we need offer no regrets. Either Christianity is rooted in the nature of things, the revelation of the real God who evidences His presence by His works, or it is not. If it is, we need not fear but that men will find it out and make a place for it in their catalogue of realities. If it is not, no adventitious aid will keep it alive. In exchanging the role of pedagogue for that of witness, the modern Church has effected an exchange which is to the advantage of all concerned.



THE TRIUMPH OF CHRISTIANITY: THE INTRODUCTION INTO GERMANY OF ART THROUGH CHRISTIANITY.

By PHILIPP VEIT



MICHAEL ANGELO IN HIS STUDIO.

By ALEXANDRE CABANEL.

BOOK IV

CHRISTIANITY AND THE ARTS

For the beauty of the Christian message a beautiful expression is more than merely appropriate; Christianity has as a matter of course pressed into service all the arts, whether literature, painting, sculpture, architecture, or music. And yet beauty and Christianity are by no means synonymous terms. Nevertheless true religion and true art can never be genuinely hostile, and Christianity has affected deeply the principles and development of art in Christian lands.

- Chapter XIV. CHRISTIANITY AND LITERATURE
- XV. ARCHITECTURE, SCULPTURE AND
PAINTING IN THEIR RELATION
TO CHRISTIANITY
- XVI. CHURCH MUSIC
- XVII. CHRISTIANITY AND THE ART OF
WORSHIP

CHAPTER XIV

CHRISTIANITY AND LITERATURE

BY ALFRED NOYES, C.B.E., D.LITT.

The influence of the Faith on modern contributions to letters as exemplified in the work of writers and poets whose pages may be regarded as of permanent value. One of the most striking characteristics of this phase of activity is the incorporation of the elements of Christianity in the works of writers who are professedly anti-Christian.

THE influence of Christianity on modern literature is as vital and all-permeating as that of the air on the creatures that breathe it. Even where the makers of that literature are unconscious of it, or unwilling to recognize it, they are dependent upon it for the very colour of the corpuscles in their intellectual veins.

It need hardly be said that the word "modern" is used here in its proper sense to mark the latest of the three great divisions of history (the other two being the ancient and the mediæval), and not, as it is so commonly used to-day, to signify merely the conventions of the last publishing season. If we include Dante as the supreme figure of mediæval literature, the singer in whom, at once, the Middle Ages culminated and the modern period began; and if we survey those works of literature from his day to our own, which seem to possess qualities of permanent value, it is impossible to dissociate them from certain elements that have been contributed to human thought and emotion by the Christian religion, even though these elements may be seized and transmuted as the oxygen of the atmosphere is transmuted by those who breathe it. It is not carrying the analogy too far to say that in many cases the distinctly anti-Christian literature in many respects corresponds only to what is breathed out again after the breather has extracted, consciously or unconsciously, what he needed for his own life; and that Voltaire himself was able to breathe out a destructive atmosphere only

because he had unconsciously drawn in, and made use of, its more vital constituents. For the influence of Christianity is not limited to those who acknowledge it, or are aware of it.

“ If the Red Slayer thinks he slays,
Or if the slain thinks he is slain,
They know not well the subtle ways
I keep and pass and turn again.”

And so—to strike at once the very centre of the enemy’s shield—it may be pointed out that Voltaire (who may be regarded as the typical anti-Christian of modern world-literature) has only one weapon of attack that still retains its weight and can still be respected in the higher regions of the intellect to-day. This weapon is his argument that the God of the theologians is lacking in the higher attributes of his own “Supreme Being.” In other words, it was impossible for Voltaire to think as the pagan Lucretius. Confronted by the Lisbon earthquake, he could feel none of the pagan satisfaction of the man who from a secure shore watches the death-agonies of another; and the higher attributes which he insists are necessary to his own Supreme Being are precisely those upon which the spirit of Christianity—transcending all the theologies—had taught him to insist:

“ Ignorer ton être suprême,
Grand Dieu ! c’est un moindre blasphème,
Et moins digne de ton courroux
Que de te croire impitoyable,
De nos malheurs insatiable,
Jaloux, injuste comme nous.”

So he wrote in his *Ode sur le Fanatisme*; and what is this but an insistence on the very attributes of the Deity which it has been the glory and the power of the Christian religion to find in its own Founder, and to give as the central explanation of its own mystery? “*God so loved the world.*” Creeds and systems, theologies and theologians, may have failed again and again and to the uttermost; but nothing can alter the fact that the strength of Christianity, the wisdom that was hidden from the wise and revealed to the simplicity and love of little children, the infinite justice at one with infinite



DANTE AND BEATRICE.

(Copyright, Braun and Co.)

By CÉSAR SACCAGI.



ROBERT BROWNING.



ALFRED TENNYSON.

mercy and divine compassion, had so wrought upon the minds of men that Voltaire himself was intellectually compelled to judge its priests by the standards which they had forgotten. Nor is this conclusion affected in the least by Voltaire's own blindness and thrice-proven intellectual dishonesty, as when (in his haste to condemn what he thought might be one of the evidences of the Old Testament legend of the Flood) he attacked the real discoveries of the early geologists; and, in the very irony of which he was so proud, became himself a lasting subject for the irony of history.

This incorporation of the elements of Christianity in the works of writers who are professedly anti-Christian is one of the most striking characteristics revealed by a careful analysis of modern literature. It occurs in poets like Shelley and Swinburne, the first of whom attacked the lifeless creeds of his own day, and described himself as an "atheist" only to make one of the most burning confessions of faith that have ever been made in poetry; faith, not in any sectarian system, but in

"That Light whose smile kindles the universe,
That Beauty in which all things work and move."

Shelley's vision of that Light and world-sustaining Love is at one with the vision of St. John; and the music in which it is expressed is a continuation of the music of Dante, in the opening and close of the *Paradiso*:

"La gloria di colui che tutto move
Per l'universo penetra, e risplende
In una parte pui, e meno altrove,"

and—

"L'amor che move il sole e l'altre stelle."

In the later poet, Swinburne, there are even more striking illustrations of the debt of anti-Christian writers to Christianity, both in thought and feeling. Tennyson, while praising the splendour and strength of one of Swinburne's early works, once asked him the significant question whether it was *fair* to abuse the Deity in the language and imagery of the Hebrew prophets. But Swinburne goes farther than this. In *Songs before Sunrise* he expresses his own highest thoughts and emotions in the language of the Bible, and in poems like *Quia Multum Amavit* the validity of those thoughts

and emotions depends upon the validity of the figures and the imagery that he is using. His poem "Before a Crucifix," for instance, in the fury of its attack on the Christianity of the churches, seemed to many of the orthodox to be merely a piece of fanatical blasphemy. But its real content is something more than this; and when he is confronted by the realities of suffering and grief in the world around him, it is not to the Greek vision of Aphrodite, or any pagan imagery that he turns to express his highest thoughts about it. Step by dark step, this so-called anti-Christian is blindly led on—as a musician is led on by a surrounding orchestra—to postulate the very principles which he was supposed, possibly even by himself, to be denying.

" O, sacred head, O desecrate,
 O, labour-wounded feet and hands,
 O, blood poured forth in pledge to fate
 Of nameless lives in divers lands,
 O, slain and spent and sacrificed
 People, the grey-grown speechless Christ."

Though he is turning the imagery to a new purpose, its validity here depends upon the truth of the central idea of Christianity, the God who became man; and the ultimate object of the poet's worship is indistinguishable from that of the saints of the Middle Ages.

" And the blood blots his holy hair
 And white brows over hungering eyes
 That plead against us. . . ."

There is, indeed, a sense in which some of the greatest of the anti-Christian writers may be said to be fulfilling rather than destroying the law which they seemed to others (and sometimes to themselves) to be attacking. Their spirit, though weakened by perversities or warped by intellectual pride—or reacting against its own environment in a way that has no meaning for others—has often, burning at its core, the anger of Christ against those who have turned His house of prayer into a den of thieves. The really valuable part of the modern literature of "rebellion," whether it be in a Christian like Tolstoi or in professedly anti-Christian writers, has this, and this alone, as the foundation of whatever greatness it possesses. At the same time it must be remembered that seeing the motes in the eyes

of others, and seeing them with anger, is an occupation that, in literature as in life, may obscure many other matters of importance; and the literature of "rebellion" and destructive thought, as such, has never risen to the heights of the great creative world-poets. The two great epics that literature can oppose to those of antiquity, during the last nineteen hundred years, are both attempts to unfold the system of the universe, and in both cases the intellectual groundwork and the spiritual vision that gives them their permanent value were the direct result of the Christian religion. The world-ranging mind of Dante could never have achieved the great musical consummation of thought in the line—

"E la sua volontade e nostra pace"

if the seed had not been sown in his mind by the earlier simplicity of the prayer "Thy will be done on earth as it is in heaven." It was the Bible that enabled Milton to rise to the height of his great argument in *Paradise Lost*—a poem compared with which even the music of Homer seemed to Landor like that of a tinkling cymbal on the shores of the ocean, and it is never to be forgotten that the values of that music are not to be sought or discovered merely in the story the poet tells or in what the logician can extract from the surface-meaning of the words. Attempts to interpret the Bible allegorically have been regarded with a just suspicion, for they have sometimes been mere evasions of questions that deserve a direct answer, and they have been pressed into the service of intellectual dishonesty. But Milton affirmed directly that his own art is a "process of speech" without which it would be impossible to tell of the acts of God. His meaning is to be sought in the symbolical values of great art and great poetry, as we seek it in the works of the great painters or in a symphony of Beethoven. The very movement of the words has a meaning that transcends their literal meaning as far as a great cathedral transcends that of the separate stones of which it is built.

"Hail, holy Light, off-spring of heaven first-born
Or of the Eternal, co-eternal beam,
May I express thee unblamed, since God is light
And never but in unapproachéd light
Dwelt from Eternity, dwelt then in thee. . . ."

Such passages as these in the great blind poet are transfigured by the spirit of holiness that he invoked. They are the mountain-peaks of the world's literature, making the heaven of heavens their dwelling-place.

II

But the influence of Christianity upon literature is not limited to those writers who have either opposed it, or, as in the two greatest masters of epic during the last nineteen hundred years, drawn their inspiration directly from its fountain-head. It is impossible here to cover the whole field, but one may indicate briefly that the literature of mediæval chivalry, in ballad and romance, as well as in the state-lie poems of the Crusades by Ariosto and Tasso, derived its nobility and beauty from ideas that had been sown and fostered by Christianity. The new compassion for the weak, the new reverence for womanhood, the truth and honour of Chaucer's "perfect gentle knight"; and everywhere those gleams of the beauty of holiness, even though it were praised as a remote star in a heaven beyond the reach of our sin-stained earth; all these things were derived from the religion of which the wandering knight in the greatest of all the poems of chivalry, Spenser's *Faery Queen*, bore the emblem upon his shield—

"And on his breast a bloody cross he bore,
The dear remembrance of his dying Lord."

But in the wider fields of later literature, where the cross was no longer worn upon the breast, the influence is no less potent. The Elizabethan drama, dealing with all sorts and conditions of men and women, may be traced back by the curious to its origin in the old morality plays; but the debt is a wider and a deeper one than that. Hazlitt has pointed out how much the Elizabethan drama owes to a religion which had taught us the love of good for the sake of good, and, in answering the question, "Who is our neighbour?" as one whose wounds we can bind up, had done more to humanize the thoughts and tame the unruly passions than all who have tried to reform or benefit mankind. "The very idea of the desire to do good, of regarding the human race as one family, is hardly to be found in any other code. The Greeks and Romans never thought of considering others. . . . But in the Christian religion the heart of a

nation becomes malleable, capable of pity, of forgiveness, of relaxing in its claims and remitting its power." And so, in Shakespeare, though his works are dramatic and can give no direct expression of his own personal creed, we can trace everywhere the prints of—

" those blessed feet
Which fifteen hundred years ago were nailed
For our redemption on the bitter cross."

We trace it in his deep sense of the moral law and still more in his humanity—

" The quality of mercy is not strained.
It droppeth as the gentle rain from heaven
Upon the place beneath. It is twice blessed.
It blesseth him who gives and him who takes."

Just as Dante owed one of his most consummate passages of intellectual music to a sentence in the Lord's Prayer, so Shakespeare owes this passage to the spirit that breathed upon a tortured world the divine sentence, " Blessed are the merciful, for they shall obtain mercy." To say that there is much in Shakespeare (as in Dante also) that conflicts with the teaching of Christ is merely to say that he was human, and that only a God could reveal the perfect harmony. The fact remains that the poetry of Shakespeare has a capacity of thought and emotion, a breadth of charity and humanity, that were not possible to Greece and Rome. He owes these characteristics to the Christian religion and to that figure of whom another Elizabethan dramatist, Decker, wrote:

" The best of men
That e'er wore earth about him was a sufferer;
A soft, meek, patient, humble, tranquil spirit;
The first true gentleman that ever breathed."

The case of Shakespeare is one of special interest, for it becomes more and more clear, as time goes on, that his figure is destined to tower above all others in the history of literature as its supreme head. It is often assumed that, in religion, he was essentially a sceptic; but

the opposite view of him, taken by Carlyle, is the true one. Whatever his opinion may have been of the creeds and sects of his own time, his apprehension of reality, and the miracle of reality, was profoundly that of a soul aware of the eternities. Hamlet, torn by so many doubts, has no religious doubts—unless his uncertainty about the penalty for violating what he himself calls the canon against self-slaughter, fixed by the Everlasting, can so be called. On the contrary, he seems tacitly to assume something like the system of Dante; and Hamlet's own utterances on prayer and sin in no way clash with the farewell spoken over his dead body:

“ Good-night, sweet prince;
And flights of angels sing thee to thy rest.”

It is quite certain that if Shakespeare had been a “sceptic” the bitterness of Hamlet would have revealed it; but it does exactly the opposite. In the very ecstasy of his passion he cries: “Look you, I'll go pray”; and, in the very bewilderment of his anger against the wrongs and contradictions of earth and his own heart, his hand is stayed from its vengeance by the sight of his father's murderer on his knees. This is perhaps the most dramatic moment in all creative literature. Its implications have never been fully realized. It sums up all that has baffled mankind (no less than Hamlet) for two thousand years, in the conflict of Justice with Mercy and man's vengeance with God's forgiveness.

But, quite apart from this, Shakespeare's attitude towards the moral law, when he explores the depths of human nature, shows everywhere the influence of Christianity. His analysis of the workings of the conscience—and here he plumbs more deeply than any other poet—is profoundly influenced by it in every detail, as in that terrible scene when Macbeth, after the murder, speaks of the two sleeping grooms:

“ One cried ‘ God bless us,’ and ‘ Amen ’ the other;
As they had seen me with these hangman's hands.
Listening their fear I could not say ‘ Amen ’
When they did say ‘ God bless us.’ ”

Lady Macbeth replies, “Consider it not so deeply,” and then

there comes, tearing its way out of the tortured heart of the murderer, the dreadful voice of one who has discovered his own conscience, and realizes with sudden amazement that the blow with which he committed the murder has stabbed it with a wound that none can heal on earth:

“ But wherefore could not I pronounce Amen :
I had most need of blessing, and Amen
Stuck in my throat.”

These things belong to an inner realm unknown to the external Nemesis of the Greeks; and when he waves aside all earthly help, he seems to be almost postulating the divine Physician, the Master of Compassion:

“ Canst thou not minister to a *mind* diseased,
Pluck from the memory a rooted sorrow,
Raze out the written troubles of the brain,
Or with some sweet oblivious antidote
Purge the stuffed bosom of that perilous stuff
That weighs upon the heart.”

Elsewhere, in the *Tempest*, he makes that healing depend upon heart-sorrow and a clean life ensuing; and, finally, though Shakespeare seldom speaks in his own person, he does in one of the sonnets point the way to the victory of the soul:

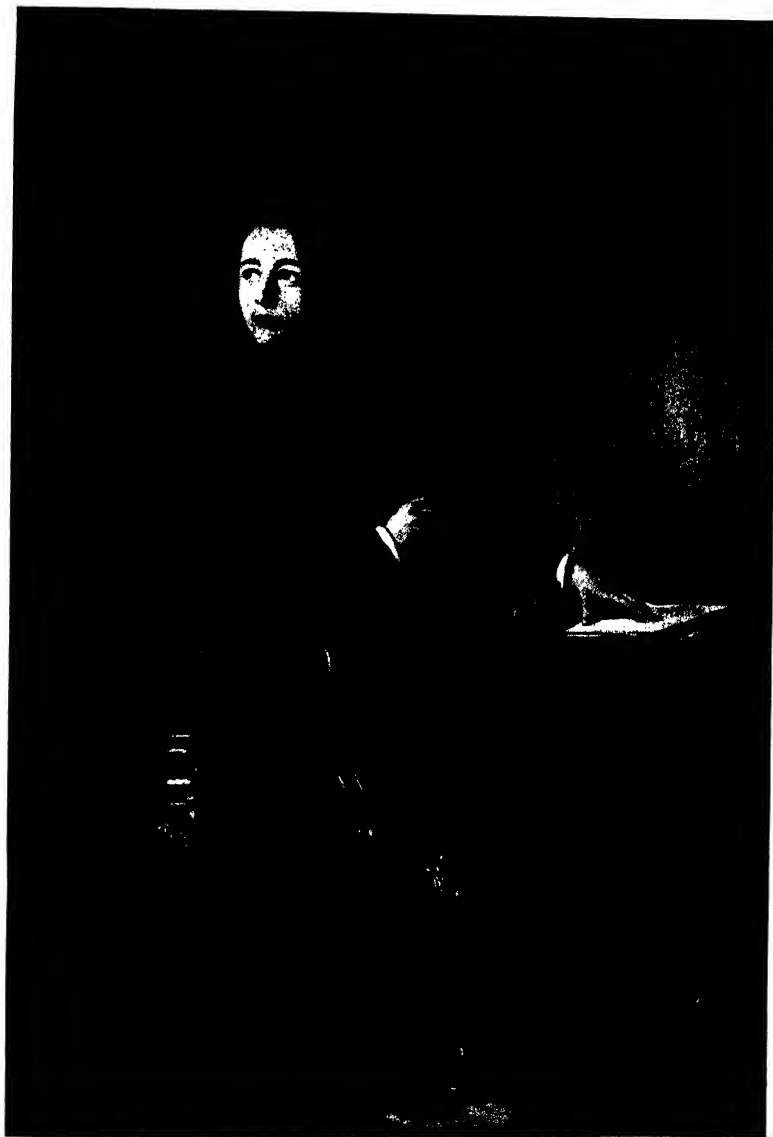
“ Then, soul, live thou upon thy servant's loss,
And let that pine to aggravate thy store;
Buy terms divine in selling hours of dross;
Within be fed, without be rich no more;
So shalt thou feed on Death that feeds on men,
And Death once dead, there's no more dying then.”

These influences are so widely and so subtly spread that it is impossible to examine them in detail. It is only possible to say that they have coloured the whole fabric of European thought, even where it is least conscious of the fact, and even where it has apparently discarded the last shadow of a religious creed. But in later

poets like Wordsworth, Tennyson, and Browning in England; Victor Hugo in France; and Goethe in Germany, the debt is far clearer than in the Elizabethan period. It is not that these poets all definitely profess a Christian creed (Goethe certainly did not, even though *Faust* adopts its mediæval trappings), but their highest thought and emotion are of an order that belongs as definitely to Christendom, and to Christendom alone, as the use of light and fire belongs to man alone among the creatures on this planet. When Wordsworth writes:

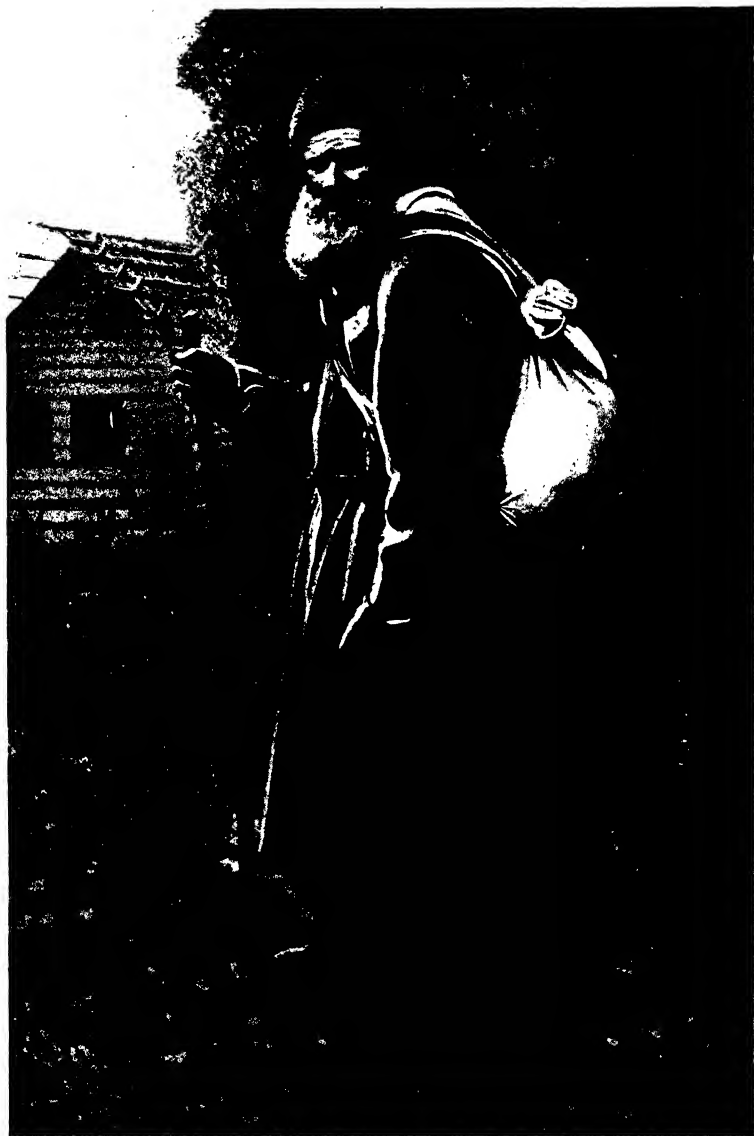
“ One lesson, shepherd, let us two divide,
Taught both by what she shows, and what conceals;
Never to blend our pleasure or our pride
With sorrow of the meanest thing that feels,”

he is only expressing in set terms a spirit that is “ far more deeply interfused ” through all the literature of his period. Of the subtler spiritual elements which literature derived from the Christian religion, the reader will find indications in the chapters on mysticism and idealistic philosophy. But here again it should not be forgotten that it is not merely in the “ mystics ” or in the devotional poets like Herbert and Crashaw and Christina Rossetti that these elements are to be found. They leaven the whole of the higher literature of modern Europe, and exert a mysterious quickening power not only upon philosophical critics like Carlyle and Tolstoy, but on the “ religion of beauty ” of the poets of the romantic revival, with its aspirations into the unseen; and on the “ religion of humanity ” (with its desire to set the crooked straight), which, even where it was unavowed and unconscious, so strongly characterizes the work of the greatest modern novelists. Of these last, in England, the best example is Dickens, who never writes as one making what are called religious professions, and yet perhaps has done more than any other writer in modern times to hasten the kingdom of heaven on earth. The sense of pity, the charity, the human kindness that suffuse the vast world of his creation, continue the work of the Master whom he seldom directly invokes. One of those rare occasions, when, like a long-suppressed cry, the direct appeal breaks from his lips, is in that marvellous scene—not surpassed by Shakespeare or any other—where a foolish and mean woman, far too commonplace to interest



CHARLES DICKENS.

By DANIEL MACLISE.



LEO TOI STOI

the modern exponents of intellectual pride, is brutally treated by the man to whom she was bearing a child:

" He answered with an imprecation and a blow.

" No angry cries; no loud reproaches. Even her weeping and her sobs were stifled by her clinging round him. . . .

" O woman, God-beloved in old Jerusalem ! . . . "

It is the cry of the Master Himself over the unremembering City of God.

CHAPTER XV

ARCHITECTURE, SCULPTURE AND PAINTING IN THEIR RELATION TO CHRISTIANITY

BY PROF. J. HUBERT WORTHINGTON, M.A., A.R.I.B.A.

The religious motive will always be one of the most potent factors in artistic expression; the great cathedrals, religious sculpture, and religious paintings rank among the supreme creative achievements.

ARCHITECTURE, painting and sculpture have their origins in religion. Take what race you will, or what epoch you will, the shrines of the gods have the first claim on the creative inventiveness of man. This is as true of the Christian era as of any other.

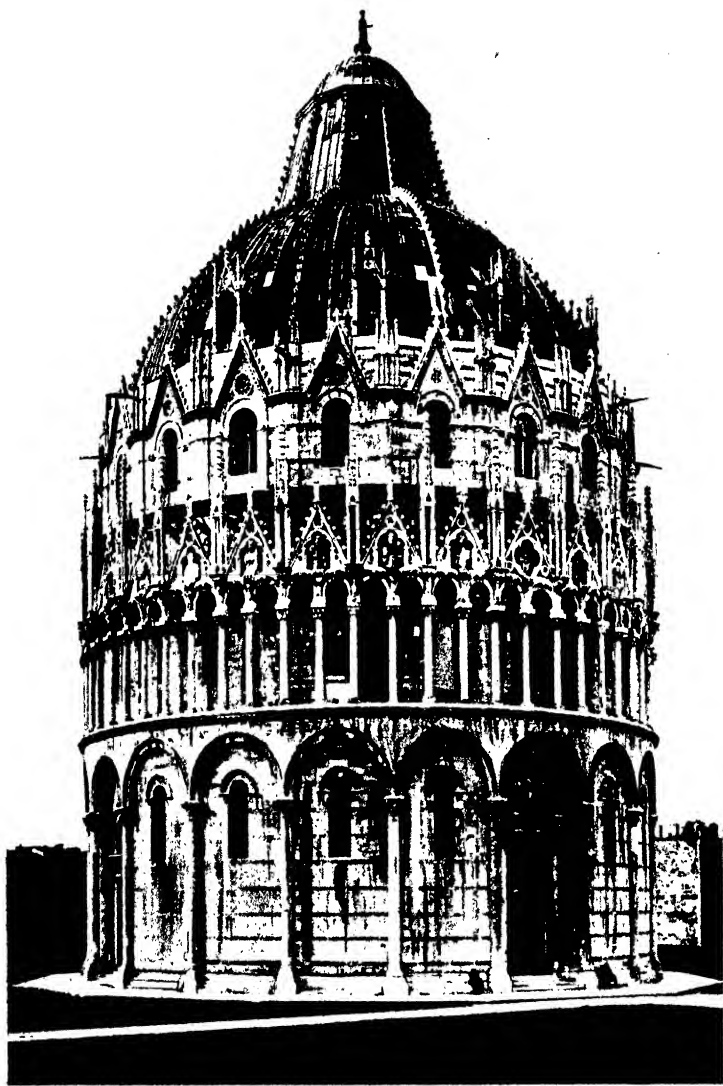
Temples may have their material uses, but fundamentally they exist to proclaim the Spiritual Presence at the altar. The altar is the heart whence all the members of the religious community draw their life.

Theories about the origins of the Christian church plans have been endless; a bare summary is all that can be given here. The Christians first met in houses, burial chapels and the Catacombs, and to the primitive Church and the early Fathers little of artistic expression can be attributed. Despised and persecuted, life was to them a denial, and art a snare. Doubtless the fact that they held that Christ's Second Coming might be at any moment led them to consider that there was no need for temples made with hands. Faced with death for their Faith, a future existence of happiness was looked to as an offset to the sorrows and miseries of this world. They met in secret.

When the Emperor Constantine (c. A.D. 313) embraced the new Faith, Christianity became the dominant religion and quickly found outward expression for its worship, absorbing many pagan uses to its service. Although it would appear that the earliest Christian



THE BASILICA OF ST. ANTHONY, PADUA.



THE MARBLE BAPTISTERY, PISA. IT WAS BEGUN IN 1153.

churches specially built were in the East, some perhaps as early as the second century, still, what served for the meeting-halls and law-courts of pagan Rome became the normal Christian model. This consisted of a forecourt, an oblong nave, with pillars and aisles, and an apse, where sat the Bishop or celebrant; in a *confessio* or crypt beneath the sanctuary relics of the saints hallowed the spot. This type of building is called a basilica, and it gave its form to the early churches, not only to the old St. Peter's at Rome, built in the age of Constantine, but to the church of the Holy Nativity at Bethlehem (A.D. 327), the churches of Syria and Egypt, of Ravenna, and of Silchester in Roman Britain. Nothing could be more direct and simple than the plan. They were simply constructed, with brick walls, wooden roofs, nave arcades, and clerestory. Generally they were sheathed with marble and mosaic, taken, as often as not, from some pagan temple.

Akin to these basilican churches is the Byzantine type, which expressed itself in great domed and vaulted buildings, mostly of brick. Of the ten centuries that elapsed between the transference of the capital of the Empire from Rome to Byzantium, and the great cathedrals of the thirteenth century, St. Sophia at Constantinople is the great representative building. It was built about A.D. 537, and is one of the greatest of the works of man. Let us pause for a moment and enter. Immediately its beauties are disclosed, and the eye leaps through its great space values and the triumphant swell of curve upon curve to the final culmination of the dome. As March Phillipps has said, it has "the unity achieved by the dominance of a single structural principle." Here, indeed, is an admirable symbol of the unity of Christ's Kingdom.

It is all glorious within—the architectural forms are clothed in vesture worthy to supplement and reveal their stately and well-balanced beauty. The columns are monoliths of verde antique and porphyry, the white marble capitals are wrought with consummate skill. The walls are sheathed in precious marble and alabaster, with *opus sectile* and inlays of mother-of-pearl. The vaults and domes and all curved surfaces glow with mosaic pictures of bright colours on a golden ground, that is softly brown in the half lights, and gleams with glittering sheen in the high lights, and the lights are for ever changing, like the shadows on a Greek Doric temple. In the days of its glory the doors were of gilt bronze, the windows of

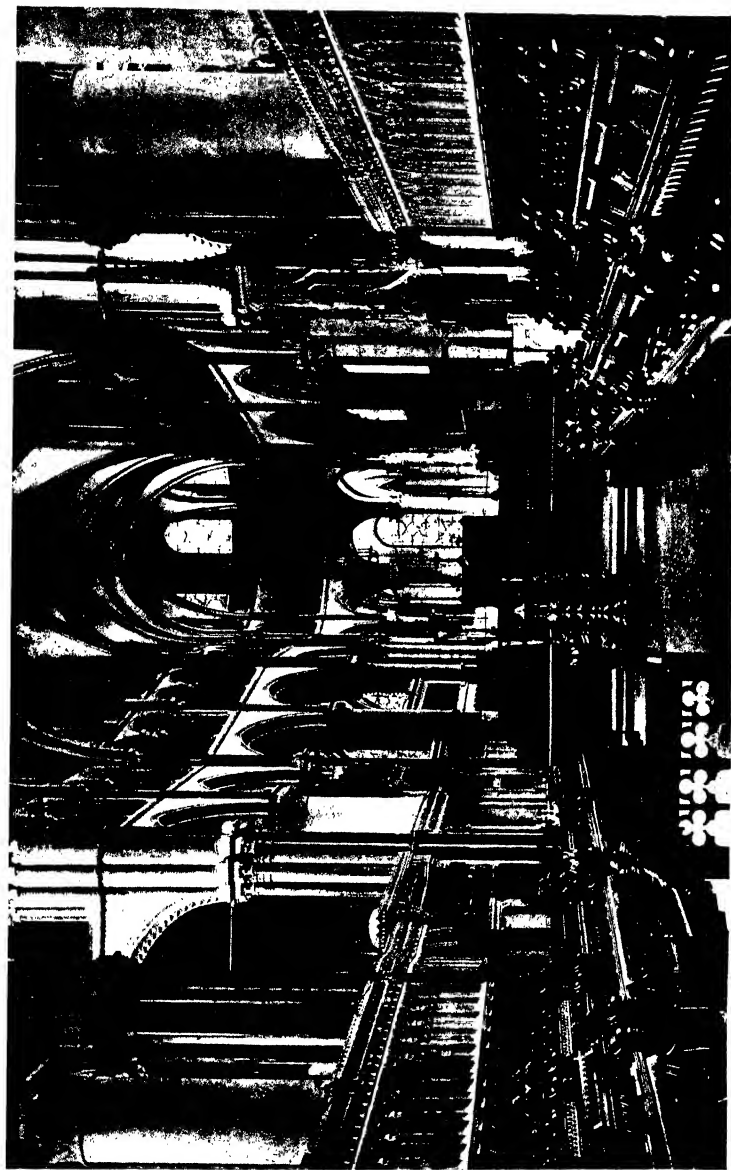
bronze grille or translucent marble, the ikonostasis or screen was of silver, and the altar of enamelled gold. Nothing was ephemeral, all had the quality of the eternal.

The decorations were as much a part of the fabric as skin is of the human body. They have endured, despite all the changes of fortune and of creed, since the days of Justinian. Christendom has produced no finer expression of itself in building.

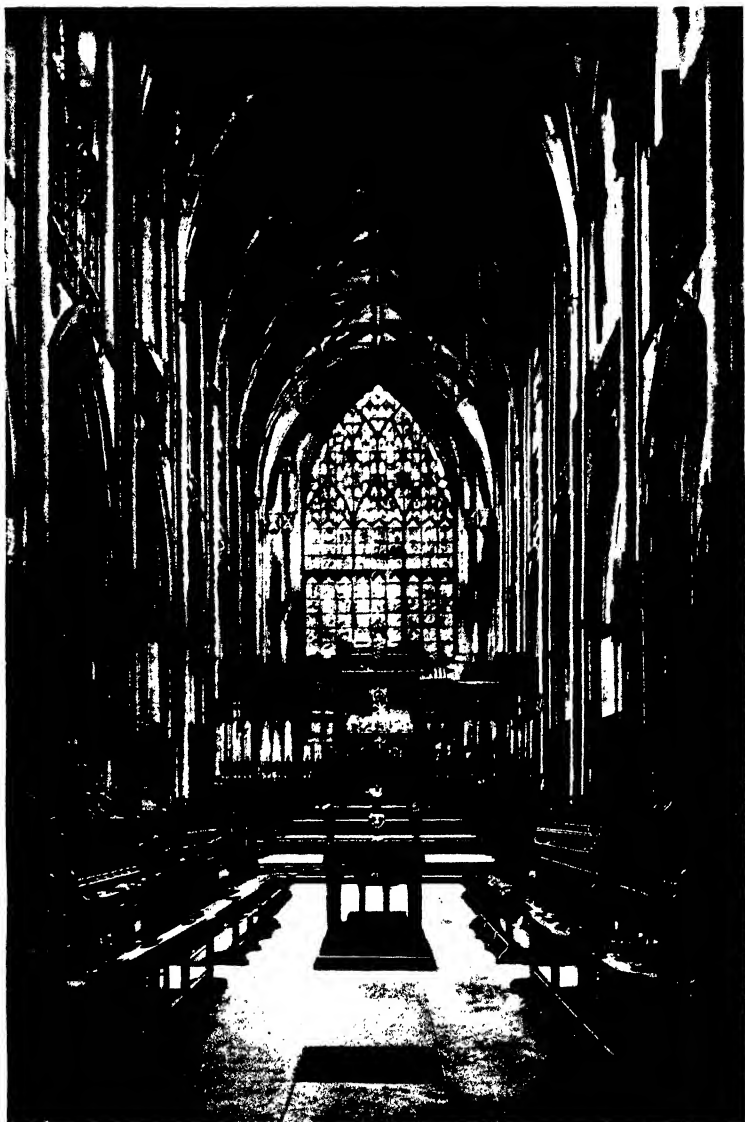
The early Christian and Byzantine Schools gave a great contribution to the architecture of the world, and we owe to them the germ of the Romanesque and Gothic systems. The plan of nave and aisles, the clerestory, the column carrying the arch, the balanced systems of vaults and domes and poise between thrust and counter thrust, systems of mouldings, grouping of windows, and Christian imagery, are part of their bequest to posterity. For them graphic art took form in mosaic, as in England and France stained glass became a dominant note in interior colour and decoration. We see their fruits in St. Mark's, Venice, in the Capella Palatina at Palermo, and in the new cathedral at Westminster.

The great phase of European art which is called Romanesque filled the transition between Roman, Early Christian and Byzantine architecture, and the flowering of the so-called Gothic art in the thirteenth century, say between 800 and 1150. It is found alike in Italy, Germany, France and Spain, and with its expression in English Norman, we come to the first real remaining traditions of our national architecture. Durham, Southwell and Romsey are eloquent witnesses to the strength found in the work of these dauntless builders: the balanced plans, the massive walls, the vaulted roofs, the great piers, the round arches, the small windows and the mighty towers make an appeal that is irresistible to this day. Their strength and serenity quieten and rest the worshipper. Their interiors were painted Bibles, but figure sculpture was comparatively rare until the end of the twelfth century.

The Norman style was the forerunner of the great outburst of Gothic art of the thirteenth century. It was an age that was reaching from chaos to civilization. The nations were in a formative stage. Mediæval society in Europe reached its climax. We see monastic expansion and the growth of cities crystallized in an architecture of romance and adventure. Everything favoured the great movement. The power of the Church was unlimited, and Christianity was the



INTERIOR OF CANTERBURY CATHEDRAL, SHOWING THE CHOIR.



THE CHOIR OF YORK MINSTER, SHOWING THE EAST WINDOW.

dominating influence behind all the works of man. It was an age of faith and fear, and both contributed to great building. As the Church guarded with jealous care the essential traditions of her creed and practice, so artistic expression maintained a fine evolutionary conservatism, ever stretching out its hands towards perfection, boldly experimenting in new structural methods, yet not at the mercy of every breath of passing fashion.

An almost unprecedented zeal for building, and the simple conditions of life and society made possible an amount and quality of work before which we can only wonder, but it must be remembered that almost all the inventive brains of the time found their outlet in building and the kindred arts, whereas now we have added all the vast fields of engineering and scientific experiment.

Take the great cathedral and abbey churches of the day. They satisfied all the requirements of worship with their profusion of altars, their processional aisles, the choir for clerics and the nave for the laity, and the tombs and chantries of the great. But Gothic art is primarily the outcome of structural experiment, of how to cover a great meeting place with a stone roof. Growing up from the plan, the great church rose in soaring lines to the mighty vaults of stone that spanned nave, choir and transepts. The pointed arch was used because it was stronger, more pliable, easier to build, than the round arch of the Normans. With the greater daring of the span and elevation of the roof, came an equivalent daring in the way pier and aisle and buttress met the thrust and action of the vaulting ribs. The adage says that "the arch never sleeps." The vaulted church is an organic system of poise and equilibrium, and from the turning of the supporting wall outwards in the forms of flying buttresses concentrated at the focal points, came the development of the cage of light formed by the many mullioned tracery for storied glass, glowing in jewelled brilliance. Add too the spires and bell-towers and the welcoming deep-set porches rich with sculpture. The structure is the essence of the achievement; without it all the glories of accessory carving, glass and painting, all the hangings, and precious metal, and music, and the magic of mediæval worship are impossible.

Noble examples of the perfect marriage of the sculptor's art to architectural design may be studied in the main doorway of Amiens Cathedral, in the Chapter House at Southwell, or the west front of

Wells. The details of the carving show how inseparable art was from life, and life from religion. Their naïve freshness, humour and vitality appeal alike to the learned and the illiterate. Their creators were of the people, they fed with them, played with them, laughed with them. And these carved and painted churches which they made were, as Ruskin has taught us, the Bibles of the common folk.

In estimating the practical influence of Christianity in England from the twelfth to the sixteenth century, no stronger evidence exists than the witness of the parish churches throughout the land. Their builders must generally have been local masons, though probably the lord of the manor or the controlling abbey paid most of the cost. Enthusiasm for fine building was in the very marrow of the race and shared by all alike. The imagination of the workmen, trained in a sound evolutionary tradition of design, was given free play, without the unity of the whole suffering.

The evolution of the English church plan is an interesting and lengthy subject. Symbolism and practical building evolution interpenetrate one another, and the pious imagination in welcoming the idea that the church plan is based upon the Cross, must bear in mind that for the structural necessity of buttressing up a central tower between nave and chancel, transepts were a necessary development, in order to give lateral support. And further, even where there was no central tower, the growing need for more altars compelled the builders to provide further accommodation. Thus we trace the evolution of single and double aisled churches, the growing importance of the chancel, and the additions of chantry chapels, until we have the full development in such churches as Cirencester, Burford, Manchester and Coventry.

What a wealth of beauty these churches of our countryside present, as in the towers of Somerset, the spires of Lincolnshire, the screens of Norfolk. Everywhere we find the timber roofs, the vaulted chapels, the porches, the buttresses, and the fascinating evolution of the window, from a slender lancet five inches wide, to the intricate traceries of the later phases, once all of them filled with such glass as we still see at Fairford. Yet what we have is but a skeleton of their former glory, when to the original glass must be added the glow of colour and imagery, symbols and accessories, such as statues and tapestries, lamps and crosses, banners and the splendid vestments of the priests.

The incentive to all this loveliness ceased with the Reformation. The suppression of the chantries, and the doctrines that they stood for, materially lessened interest in church building. Henceforth the best work was done in the building and enlargement of country houses. Initiative and impetus had left the Church. Art became secular, rather than religious. The effect of the Reformation on the arts relating to the Church in England was to submerge sculpture and painting, which are even now only beginning to recover.

What was there for a Protestant to paint? He could not paint the Madonna and Child, or the Crucifixion, or the Saints. The wealth of Christian symbolism and allegory was disallowed. There was no place for painting.

The great heritage of pictures, mural paintings and colour in our churches was swept away. We can never gauge the loss. The same can be said of sculpture. Ornament was confined to architectural enrichment: it had no real expressiveness or message. It is true that angels' heads and cherubs' wings, swags of fruit and flowers, and eggs and darts were carved with lavish profusion, because there was nothing else to carve—but this is hardly sculpture, and looks as well in the public library or council chamber as the church. The Protestant religion laid all its emphasis on ethics and theology. The sermon was more important than the Sacrament, symbolism and mystical devotion gave way to reason.

Following on the fiery but destructive zeal of the Puritans, came the rank materialism of the Established Church in the eighteenth century, and then the Wesleys, rising in protest against the deadly sluggishness of English religion, whence mysticism and enthusiasm had for a time departed. Man claimed the right to be able to think for himself, and chose the form of worship that best suited his temperament. We can admire the genuine beauty of the Quaker system. The little meeting-house at Jordans, in Buckinghamshire, embodies the noble simplicity of their creed. It was like their clothing and their food, good but extremely simple and austere, devoid of all those impulses that lead to expression in the graphic and plastic arts; for Christians of the Puritan tradition anything ornamental, symbolical or beautiful in worship was of the devil. And something of this spirit was captured by the various Non-conformist bodies, in their early stages at any rate. The remark of an old wine-merchant given to religion and good works, that

"Everything that's pleasant's wrong" rather summarizes the average attitude of his class towards the beautiful.

Architecture is an essential part of every civilization. Painting and sculpture may vanish for a time, but the art of building is inevitable. The Reformation could not kill church building entirely. It is true that until the fire of London ecclesiastical architecture in England is negligible, but the fire gave Wren his opportunity. He had to build a great cathedral and fifty-three parish churches for the reformed religion. He did not attempt a feeble imitation of a mediæval church, but with his independent and adventurous mind set about the solution of the problem to suit the conditions of his day. Protestantism had come to stay; Wren himself was a loyal Protestant churchman and he embodied a type of church entirely in keeping with the thought of his generation. We cannot dwell on the beauty and originality of his steeples that clustered round the great dome of London, but the planning and purpose of the churches must be considered in order that his great contribution may be understood. When nearly eighty, in the reign of Queen Anne, Wren summed up in a letter his great experience as a church builder:

"The Churches, therefore, must be large, but still, in our reformed religion, it should seem vain to make a Parish Church larger than that all who are present can both hear and see. The Romanists, indeed, may build larger Churches; it is enough if they hear the murmur of the Mass and see the elevation of the Host; but ours are to be fitted for Auditories."

Here we see that element of common-sense, the spirit of compromise, and the solution of the practical problem carried to its logical conclusion. The capacious and comfortable pews and galleries, the splendid woodwork, the ostentatious pulpits, all speak of an age of bigwigs and knee-breeches. The churches were auditories and meeting places, and the sacraments had only a secondary significance.

Wren was succeeded by Gibbs, Vanbrugh, Hawksmoor and Chambers—and then the revivals began and practitioner and critic alike entered upon a period where all is chaos. The Renaissance tradition lasted with us from the Reformation to the nineteenth century; and then the battle of the Styles began, when town councillors wished to be accommodated like Roman senators, and

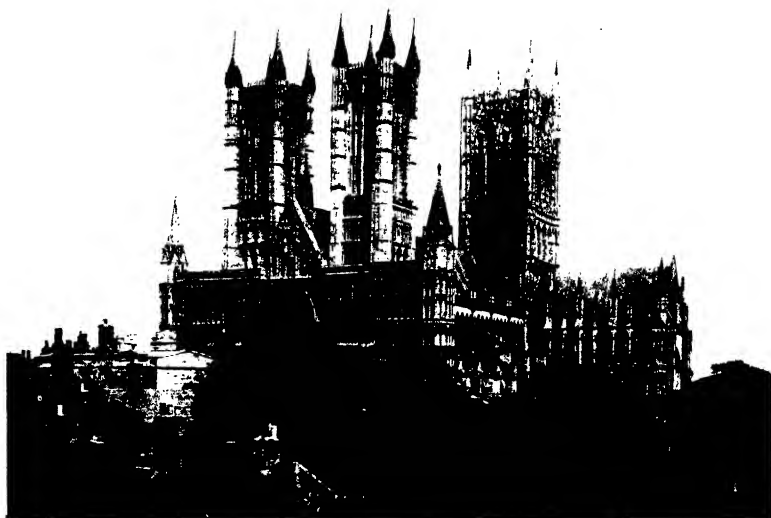


SIR CHRISTOPHER WREN SHOWING CHARLES II HIS DESIGNS FOR ST. PAUL'S.

By SEYMOUR LUCAS, R.A.



DURHAM CATHEDRAL.



LINCOLN CATHEDRAL.

the Nonconformist chapel aped the glories of mediæval Gothic. To adopt a phrase of Professor Lethaby's, architects became "hair-dressers in the styles" instead of "men of power as practical builders." They became "the purveyors of whims, ecclesiastical and domestic." The revivalists aimed at making modern purposes subservient to foregone architectural styles. Take St. Pancras Church in London as an example. It is the work of a great scholar and archæologist, yet who can justify it as a Christian church? What have the Greek Ionic portico, the Caryatid porch, the piling of Tower of the Winds upon Tower of the Winds to do with either the Christian religion or our London climate? It was built in 1819. Then the Gothicists rejoined, "If you can copy Grecian temples, we can copy mediæval fanes and perpetrate Gothic pig sties."

Pugin the younger flashed on the scene. He has been described as "a wild, monastic, sea-loving eccentric who joined the Church of Rome in honour of mediæval architecture." He writes, "Let us choose the glorious epoch before the Reformation as our type, and reproduce the gorgeous effects of the Middle Ages, before the accursed light of Reason destroyed the phantasm of that massive darkness!" He and his followers preached truth, but in many instances they practised falsehood.

The essentials of architecture were forgotten—style, fashion, masquerade, cheap imitation and insincerity held the day. The fine old English oak-work was pulled out—pitch pine became the fashionable wood. Brass, glass, gasbrackets, plush and stencil ornament made horrible the House of God, and church building went on everywhere to meet the rapidly increasing population.

If one may venture to predict the church of the future from present tendencies of ecclesiastical and architectural thought, one might assume that it will possess a simple beauty of its own, freed from the archæological imitations of the nineteenth century. It will be more than a place of worship. Set amidst some new thickly populated district, parsonage and vestries, hall and class rooms, lads' clubs and playgrounds will cluster round it as a centre of life and progress. All these aspects of a live community will be thought out on a carefully conceived "town plan," that takes into account all possible developments for the future. A quiet harmoniousness of design will reduce to simplicity these several elements. Well-kept

grass and shady trees, and bright beds of flowers will supplement its architectural beauties.

The church itself will have a clean-cut plan, with fine axial vistas. It will not display all the complicated stock-in-trade of a mediævalism that is past and gone, be it never so beautiful. It will be a building relying for its effects on a great simplicity rather than on profusion of ornamental details. On the exterior, the fine tradition of English brickwork will show its texture in great masses, planes and surfaces. Proportion, light and shade, and a well-adjusted balance between void and solid will be the essence of its effectiveness, with here and there some choice piece of carving, set as a jewel on a restful ground. Within, the great developments of ferro-concrete will give a spacious nobility to barrel vaults and domes, with walls of simple plaster, as a foil to glass, and rich embroidered hangings, and, let us hope, some great altar piece giving a rich splash of colour, teaching some vital message, as of old.

The walls will no longer shout with monuments of indiscriminate size and shape and vulgarity, but a benevolent control and uncompetitive modesty will ensure a dignified and harmonious, rather than a commercial and discordant record of the dead.

Once more colour and symbolism will become significant amongst us, and music and well-ordered ceremonial will accord with a setting that will contribute to a nobler worship, to the uplifting of mankind, to the gratitude of posterity, and the greater glory of God.

II

To appreciate the significance of architecture as a handmaid of religion we must recognize that the grandest and sublimest qualities of architecture are the result of the co-operative and co-ordinated effort of many people.

Every building scheme represents a three-fold aspect. First, there is the initiator or client, and the responsibility of those who embark on a building is great. For architecture is the greatest of the social arts. It is inseparable from the lives of the people. It can both bless, and it can condemn. Therefore, the initiator, whether Lord Bishop or Church Council, has a responsibility which should be realized. The ultimate praise or blame is his, for no architect can produce a fine result without a discriminating patron. He can do no good work if there is unbelief. Too often the architect is chosen

because he is Aunt Sarah's nephew, or attends the Sunday school. It is not thus that we choose our surgeons, and, as the saying has it, they can bury their mistakes. The architect cannot. Secondly, there is the designer or architect, he who gives form to the idea, brings unity out of complexity, conceives the shape and controls the execution. His responsibility is likewise great. To entrust a building to a man is an act of faith, and much is demanded of him to whom much is given. And, thirdly, there is the builder, who with his sub-contractors and army of craftsmen, carries out the idea, erects the structure, perfects the details, and adorns the completed building. Client and architect avail nothing without a loyal co-operation in the executants. There is not that love of work for work's sake, that pride in craft, that joy in bringing a task to a successful conclusion that there used to be: yet there is joy over every sinner that repenteth, and the real man is apt to respond to good leadership, and likes to work on good work, and carry out a good design, and receive recognition for work well done.

Here, then, is work for the Christian Church to-day as in the past. It should not go and buy church ornaments ready-made from the brass shop to the disglory of God and man, but should encourage such works as are of good report. Better a small well-wrought altar rail than a big jerry-built screen. Vulgarity should not be tolerated in the house of God. Yet we still see it on every side, and in men not wholly given up to the devil; in fact, often in very pious men.

It used not to be so. In the days of old the craftsman did his piece of work for a particular purpose. Something should be designed for a position, not a position for something. The gargoyle of the church tower, the Madonna in the porch niche, the "Doom" in the West window, the miserere of the choir stall were not bought in shops, ready-made, turned out in dozens. Such commercial instincts in God's House are akin to money-changers in the Temple. The craftsmen whose work we all love were purposeful artists working for a purposeful position, generally to the glory of God, or at least for the enjoyment of man. Work well done instils reverence; it uplifts the soul of man. It expresses the everlasting spiritual needs and desires of humanity. Can we imagine that Christ, Who was a carpenter for all those years, failed in finishing the work that was given Him to do?

We must face the lamentable truth that art has been divorced from religion. Have not the average modern churches or chapels of the nineteenth century been conceived on commercial lines? Their structure and their decoration alike are such that a soul sensitive to beauty cannot worship therein. The artists shun them. Beauty has many forms of expression; it is not limited to the splendour of a mediæval monastery, or the Madonna of a Bellini, or the stately ceremonial of Liverpool's new cathedral. It is apparent in the simplest places of worship, such as the seventeenth century conventicle at Dean Row or the Friends' meeting-house at Jordans. Why did the Nonconformists fail to maintain the old Puritan tradition? Why are England and Wales full of the hideous imitation terra-cotta Gothic that defaces town and country? But churchmen high and low, and Roman Catholics as well as Nonconformists, are to blame. Few can absolve themselves from the nineteenth century scourge of ugliness in the House of God.

The great religious buildings of the world, such as the Greek Parthenon, the Roman Pantheon, Sancta Sophia, Chartres, Westminster Abbey, St. Paul's, Liverpool Cathedral, represent something sublime in the works of man. Thousands have laboured with loving hands to produce them in friendly co-operation, so that each tiny detail may contribute to the glory of the whole. Such art is almost an epitome of Christ's religion.

"As fellowship in a nation supports each citizen and guarantees his freedom; as fellowship in a regiment sustains a soldier's courage when, alone, he might fail; as fellowship in a trade-union supports the solitary worker with the protection of comradeship—so fellowship in the Church is meant to sustain the weakness of the individual through all experiences of failure and disillusionment; the sympathy of a common creed is meant to carry him through periods of depression and vacillation; and the gifts of divine grace, as embodied and guaranteed in sacraments, are meant to lift him out of the vagaries of subjective emotion upon the solid ground of objective reality."

Thus Bishop Gore has summarized the great truth that the Fatherhood of God and the salvation wrought by Christ are to be realized only in the brotherhood of man, which is the Church. The great churches of the Middle Ages are a living witness to this idea. Consider Amiens or Rheims Cathedrals, or Durham or



ST. MARK'S, VENICE

Gloucester, Lincoln or Westminster—no single brain by itself could conceive and execute such monuments to its individual glory. They are a symbol of the brotherhood of man, of the one Catholic Church, of the Great Architect of the Universe.

It may perhaps be felt that architecture has been given an undue prominence in this chapter, and that the sister arts of painting and sculpture have not had their due, but our attitude to art is not the same as of old. We forget that "All Art is one," as Michelangelo so truly said. The barriers that have arisen between the arts are of recent growth, and may be compared to the divisions which have so weakened the witness of the Church of Christ. It is not generally recognized, even by the exponents of the arts, that art will never regain that grip which it used to have upon the lives of men, until the carver and the painter work hand-in-hand with the builder, as in the days of the Athens of Pericles, or when the mosaic workers enriched the Byzantine churches, or when mediæval art flowered in its glory of glass and carving and mural painting, or as in the first fresh outpourings of the Italian renaissance. It is hardly an exaggeration to say that the Reformers and Puritans deprived England of her religious painting and sculpture. Only faded fragments or mutilated morsels remain. At Fairford Church one can see the complete theological system that the stained glass of a parish church displayed, and at Westminster Abbey skilled research is disclosing a faint memory of the colour of the royal tombs and the brightness of heraldry of the days when the Confessor's shrine, glorious with jewels and gold, rose triumphant above the low reredos of the altar, surrounded by noble effigies of England's kings. But these exceptions are rare. For the most part only the architectural shell remains. The paintings and sculpture of the church have been ruthlessly destroyed. The arts no longer represent a trinity in unity, as of old.

Mosaic was the chief decorative medium of the Byzantines, sculpture and stained glass that of mediæval France and England, and architecture was emphatically the dominating art. To Italy, however, must be given the first place where painting is concerned. Conditions were particularly favourable to this end. Gothic architecture was always an alien growth in that classic land. With her sunshine and climate there was no logical call for the development which in France and England led to the maximum elimination of the wall, and the consequent provision of vast traceried areas for

the displaying of coloured glass. Italy retained her plastered wall surfaces, and small windows, and thus mural decoration became the natural form of expression. To Cimabue, Giotto and the primitives of Tuscany art was almost exclusively religious, mystical and devotional. Giotto's arena chapel at Padua, his lower church at Assisi, his Bardi chapel in St. Croce, are epitomes of the best religious thought of the day, and must have exercised a powerful influence on their beholders. Giotto began a mighty movement—the New Renaissance still maintained the mediæval beliefs and dogmas, but it revolted against the bondage of tradition in art. A humanist feeling was in the air, an interest in the individual. The study of form and perspective and modelling and light and shade, gave a swift impetus to the graphic arts. Masaccio, in the Brancacci chapel, is as far ahead of Giotto as Giotto was of his predecessors. It is true that there were many admirable portraits, historical scenes and pagan allegories, yet the bulk of Italian painting was essentially religious. Consider the works of Fra Angelico, Benozzo Gozzoli, Filippo and Filippino Lippi, Botticelli and Ghirlandaio.

In what a fresh and living way the eternal experiences and truths of religion are represented in a contemporary setting. Here, as in the thirteenth century, art is inseparable from life and from religion. Consider the Nativities, the Last Suppers, the Crucifixions, the whole range of the Bible story. With what delight beholders must have recognized their unholy prior in Judas, or the Master and his Wife as donors, praying before the Madonna and Child.

Thus art was living, and the truths of Christianity were represented as eternally new, not as events of a remote past.

The output is almost incredible. Here we have the gentle serenity of a Perugino, the mystical and decorative nobility of a Piero della Francesca, the vigour of a Signorelli, the skill of a Mantegna. Venice contributes her Crivelli, her Carpaccio, her Bellinis—Leonardo follows with his Last Supper, Michelangelo with his Sistine Chapel, Raphael with his Stanze Frescoes and Madonnas. Nor must Giorgione, Titian and Tintoretto be forgotten.

The world's art galleries are crowded with their outpourings, and yet the churches of Italy are not bare. These men did not paint for the Uffizzi, the Pitti, the Louvre, the National Gallery, the Metropolitan Museum. They painted the walls and altars of the churches where the people worshipped. Why paint a religious picture for a

picture gallery, why send a Madonna to the Royal Academy or the new English Art Club? We may point to Holman Hunt's religious pictures, but there is a certain precious aloofness about the pre-Raphaelites. We may cite the human tenderness in Watt's "Love and Life," but what are these among the great bulk of modern art? The English have a genius for landscape and for portraiture, but these do not express the devotional spirit of the race. Religion has lost touch with art. With sculpture it is much the same. When Donatello, Verocchio, Mino, Desiderio and the Della Robbias carved their altars, shrines, and tombs, their pulpits and singing galleries, their Madonnas and their Crucifixions, the same spirit that animated architecture and painting gave life to sculpture. But religious sculpture is rare to-day. In stained glass we had Morris, Kempe, and Whall, but they are gone, and it is to be hoped that their work will bear fruit, for stained glass is a natural tradition in our land.

So we come back to architecture, the mother of all arts, without whom the others can scarcely survive in relation to the Church, if they can really survive at all, since the private patronage of the nineteenth and early twentieth century is passing away.

This post-war world, full of social and economic changes, with its passion for modernity, its apparent contempt for the past, its hatred of discipline, its rush and speed and noise and fashions, has over-reached itself. Much that we see to-day is the natural reaction from the conventionality, sentiment, and ugliness of the nineteenth century, and the self-sacrifice, heroism and disillusionment of the War. But the modern world is sick and tired. It has not solved life's mysteries, it has not explained the problems of sin and pain. It is not satisfied.

The whims and idiosyncrasies of modern art, its introspectiveness, its striving after "originality," are symptoms of its dissatisfaction. These ephemeral fashions have not gripped the race-consciousness. They are the cult of a superior few. A revival of the Spirit, a fearless expression of the truth about God and Humanity, a denial of the egotistical and the materialistic is what we need to-day. Art can only flourish at the will of a people that desires Beauty and the fruits of the Spirit. The Church must regenerate the modern world and uplift the spiritual outlook of man before any great wave of outward expression can be expected.

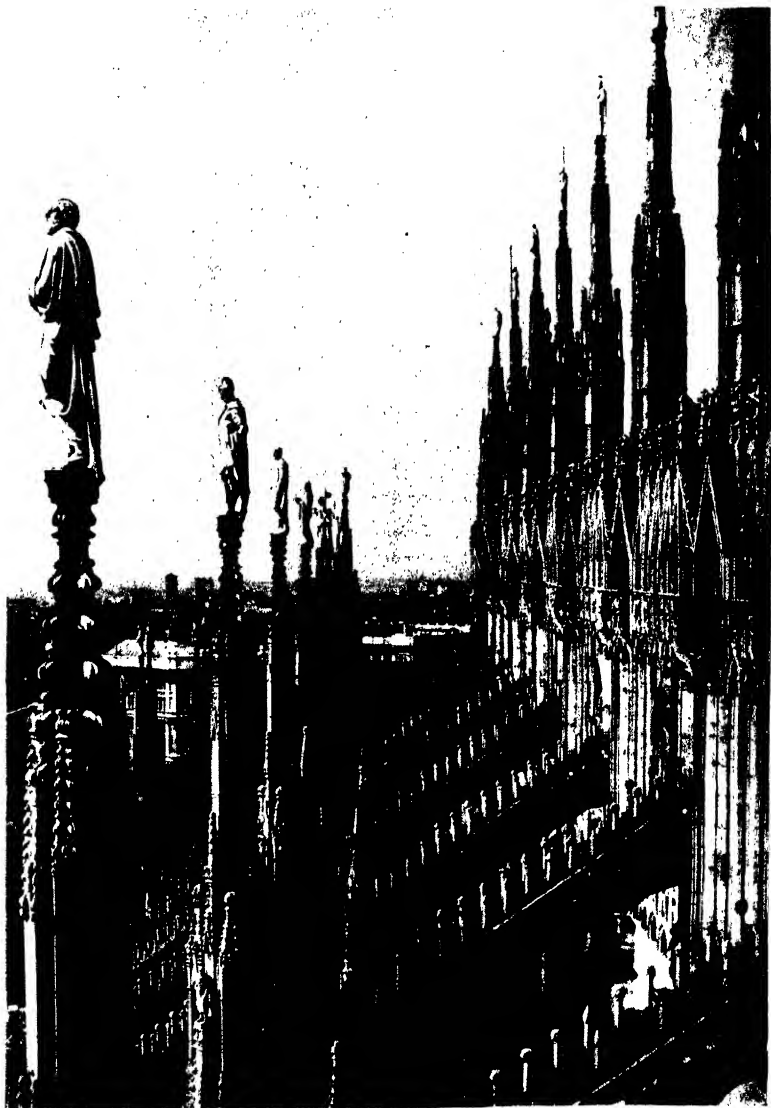
Great art only comes in a great spiritual age. Periods of material

success or political power seem to have but little effect. The political power of the Florence of Lorenzo de' Medici was of little account among the great kingdoms of this world. Yet in the realms of the spirit it was supreme. We have but to compare with it the prosperous and powerful England of the nineteenth century, or the weary England of to-day.

A nation which is satisfied by the modern cinema, by inveterate gambling, by game-watching, by the sensational press, by speed, and shop-walking, is not likely to make the effort and sacrifice without which no abiding art can flourish. Real art is the outward and visible sign of an inward and spiritual grace. It has the quality of the eternal. Like religion its revelation is made vital for each generation that desires it. Like Christianity it has fundamental truths that transcend all passing forms of expression. Beauty is one of the greatest expressions of the Divine Spirit in man. It is one of the Absolute Values.

There is a new spirit emerging from the mists of discontent. The witness is feeble when compared with the great ages of faith and art, but there is evidence of a new life in art—at last there are signs of a more enlightened patronage and demand, signs that architects, painters and sculptors wish to join hands once more, to co-operate in a friendly spirit of give and take, to understand each other's point of view, and attain to strength from unity. Our better sculptors claim the right to carve on buildings, our better painters claim wall space to decorate. Lettering and inscription and heraldry give once more beauty of form and glow of colour. At last we have a Royal Commission of Fine Arts, bishops are setting up Diocesan Committees to control all additions and ornaments in churches, the enlightened press gives to the social arts and architecture a hitherto undreamed of encouragement. Hope is in the air. For visible expression of such things there is the noble new cathedral at Liverpool, there are the stations of the Cross in Westminster Cathedral and the decorations that have occupied the apse in the Basilica at Wembley. All these are vital works.

Nor must we forget the cemeteries of our dead in all the areas of the Great War. For the vulgar monstrosities of our home cemeteries and churchyards we have quiet resting-places, laid out with skill on broad and simple lines. The simple harmony of ordered headstones, standing among fragrant beds of English flowers and restful lawns



MILAN CATHEDRAL, WHICH IS ADORNED WITH OVER TWO THOUSAND STATUES.

(Photo: Donald McLeish.)



WEST FRONT OF WELLS CATHEDRAL.

beneath the shade of trees, speak of the equality of a common sacrifice. The cross and altar stone give point and significance to every group. Would that all our memorials at home had caught the same nobility of spirit.

Finally, it must not be forgotten that Sunday religion is a reproach, and the Christianity that confines itself to church going is dead and void. What avails a beautiful church if all around it are soul-destroying slums? The great hospitals, schools, housing schemes, and playing-fields of our day are witnesses to the Christian spirit. We cannot expect good churchmanship without good citizenship, and good citizenship is scarcely to be expected in conditions worse than pagan. In our prisons and asylums let us look for signs, as well as in our parish halls, just as in the monastery of old we find embodied all the agencies of civilization, in the school, the guest-house and the hospital, as well as in the church.

Art is part of life, and a very important part. It is an instinct inseparable from man. Alienate art from religion and religion is the poorer. In the great ages of faith there was no such barrier as exists to-day. Artists feel that the Church passes them by on the other side. It should not be so. After all, the real artist should not be treated as an alien, a Bohemian, a free-thinker, an egoist. He should be regarded as possessing certain Christian qualities. No one can create without faith, no one can make beautiful things unless he has kept the heart of a child, unless he has retained the sense of wonder. To the real artist life is a radiant and extraordinary thing. He should be an apostle of joy, an interpreter of the inmost aspirations of his day. At heart he believes in a kind of communion of saints in his reverence for the great artists of past ages.

The late Mr. Clutton Brock, in his little book called "The Ultimate Belief," told us that there were three activities of the Spirit—the moral, the intellectual, and the æsthetic. Morality to excess breeds a prig, intellectuality to excess a "high-brow," and æstheticism to excess is something worse than these. It is the blending of these three activities of the Spirit that are necessary in the complete Christian. Every virtue by itself may constitute a danger. A good Christian should no more acquiesce in ugliness than he should in evil, and in considering the claims of beauty in religion let us remember the pot of spikenard, the beautiful and precious gift that might have been sold for much and given to the poor.

CHAPTER XVI

CHURCH MUSIC

By SIR HENRY HADOW, D.Mus., LL.D., F.R.S.L.

Of all the arts which stand in a relation to the Church, music has had a history peculiarly its own, for its association with Christian worship has been intimate at practically every stage of Christian development.

THE part played by music in the service of the Christian Church is in its origin an inheritance from Jewish tradition. Allusions to service music in the Old Testament are not only very numerous, they are also indicative of a high level of skill and inspiration. The Singing School, established by David at Jerusalem (1 Chron. xxiii. 5; see also 1 Chron. xv. and xvi.), is the largest in recorded history; the festival music at the dedication of the Temple (2 Chron. v. 12) seems to have surpassed in magnificence any other display of which we have knowledge: the superscriptions of many of the psalms are careful instructions as to methods of performance, and one of them, "maschil," which appears in no less than twelve, is interpreted by most scholars as implying an accompaniment of special splendour and elaboration. Despite much recent research we still know little about the Jewish musical system: there can be no doubt that it was far in advance of any other in the ancient world.

To such observances the Christian Church bears witness from its very foundation. After the Last Supper our Lord and His disciples sang together, probably the hymn called "The Great Hallel," extending from the 113th to the 118th Psalm, and including in the 116th a wonderful premonition of the agony and the glory that were to come. St. Paul not only enjoins the singing of "psalms and hymns and spiritual songs" (Eph. v. 19; Col. iii. 16), but in all probability quotes some early specimens of Christian hymnology, e.g. the passage beginning "Awake, thou that sleepest" (Eph. v. 14);

possibly also the statement of the Creed in 1 Timothy iii. 16 and the Doxology in 1 Timothy vi. 15-16. The Apocalypse also is full of references to song (e.g. iv. 8-11; v. 9-10; vii. 12; xi. 17-18; xiv. 3; xix. 1-7), and clearly implies some practice of hymn-singing in the Church to which it was addressed. By the beginning of the second century we can add a valuable piece of external testimony. Pliny's letter to Trajan (Pliny, Epp. 96 (97)), written from Pontica somewhere between 113 and 115, speaks of the Christians as coming together at dawn, "*carmenque Christo sicut deo dicere secum invicem.*" The last word of this passage seems to imply some practice of antiphonal singing, which, according to tradition, was introduced into the Christian Church about this time by St. Ignatius. At any rate, we have early and unmistakable record of the practice of singing in Christian worship.

It is natural, therefore, that the earliest development of Christian Hymnody should come also from the East. The first great Christian hymn-writer, whose name we know, was Ephraem the Syrian (c. 307-c. 373); the first two liturgies, those so-called of St. Mark and St. James, undoubtedly included antiphonal singing; the Council of Laodicea (fourth century) not only laid down regulations as to performance, but sternly forbade the intrusion of music by unskilled or unqualified composers; the use of "*tropes*" (an entirely musical device) has been said to date from the Council of Chalcedon (451); early in the sixth century Justinian, himself a composer, was legislating for the music of the Byzantine Church, which, early in the seventh century, came to fruition with the famous Akathistos Hymn of the Patriarch Sergius, and with the establishment, more or less definite, of an acknowledged canon.

In the West our first notable hymn-writer was, perhaps, St. Hilary; our most eminent was St. Ambrose (c. 340-c. 397), who established at Milan a system of antiphonal singing, "*secundum morem orientalium partium,*" and for basis of his music took over the Greek Citharædic modes and very possibly some of the melodies that had been written in them. Further contributions were made by the hymn-writers—Augustine, Prudentius, Venantius Fortunatus and others; and in the regulation of the service by Popes Damasus and Gelasius. The catastrophe which befell Western Europe when Totila took Rome in 546 was only a temporary check; fifty years later the edifice of our Church Music was rebuilt

largely by the hand of Gregory I. His place in its history has been obscured by untenable claims which later ecclesiastical tradition set up on his behalf—there is no ground for assigning to him any particular invention or discovery, but none the less we may ascribe the revival of Church Music largely to his authority and influence. It was entirely due to his initiative that our first English School was set up in Kent by Augustine; it was indirectly due to his authority that the various uses—the old Irish, the Mozarabic of Toledo and Valladolid, and even the Ambrosian of Milan—ultimately gave way before the supremacy of the Roman.

In England the first seeds of Church Music were sown by Augustine and Paulinus, the first harvest was gathered by Wilfrid and Theodore of Tarsus (see Bede iv. 2), who were followed by Aldhelm of Sherborne and later by Dunstan of Glastonbury. England seems, indeed, to have been during these centuries pre-eminent in music. The practice of polyphonic singing, which not only created our notation, but revolutionized the whole art of music, may have begun as early as Dunstan; it was certainly known in England when Gerald Barry wrote his itinerary. In the thirteenth century the first great monument of polyphonic skill, which still survives, was set up by the Reading monk John of Fornsete. John Dunstable in the fifteenth century was the earliest composer to obtain European repute, and the Flemish School which, in its turn, taught the Italian, was very deeply indebted both to his instruction and to his example.

Among the Flemish Church composers of the early period the most famous were Dufay, Binchois, Okeghem and Josquin des Près, the last of whom was Maître de Chapelle to Louis XII. To these should be added Goudimel and Willaert, who carried the Flemish style to Italy and from whom its influence spread to Festa, Cipriano di Rore and other early Italian musicians. Morales, the first great Spanish Church composer, sang in the Papal Choir at Rome and may, by tradition, count among the members of the Italian School. Much of their Church Music is printed in the Dodecachordon of Glareanus (Basle, 1547). The English followers of Dunstable were at first less famous than the continental; they copied rather than developed his methods; but there is some notable music preserved in the Old Hall MS., and among the composers therein illustrated a high place may be given to King Henry VI (see Wool-



BEETHOVEN BEFORE THE PIANO.

9 SALAR JUNO

We in England are, perhaps, more concerned with the reforms instituted by Cranmer, who, in his famous Letter on the Litany (1544), required that the elaborate and intricate polyphony of the time should be discarded and replaced by a simple, close-fitting music which should set one note to each syllable and so allow the words to be clearly heard and understood. This rule was, probably, not intended to be rigorously and literally observed; it set an ideal rather than enjoined a practice, but it had an immediate effect on English Church Music. To it we owe that beautiful anthem, "Lord, for Thy Tender Mercy's Sake," Tallis's "Dorian Service," and—with considerable assistance both from Germany and from Geneva—the development of the English Psalm tune. During the great period of English Church composition our music, though often rich and gorgeous, is more simple in texture than that of the preceding generation and is far more conscious of its function as a vehicle and interpreter of the text.

Church Music in Germany after the Reformation was largely affected by the Lutheran tradition and, indeed, derives from Luther some of its noblest melodies, e.g. "Ein Feste Burg." The great musical resources of Germany had not yet been brought into full operation. As a preliminary she was contributing to Church Music the chorale, which has had more effect than anything else on the lyric inspiration of the service, and a fine school of organ composers, setting a tradition of dignity, reverence and solid craftsmanship.

Apart from these the current of Church Music during the seventeenth century was setting in a new direction. At its beginning the change from the ecclesiastical modes to the modern scale brought into it new opportunities of harmony and modulation and, therefore, vivid and dramatic treatment of music; about the same time emerged the two forms of opera and oratorio, in which such treatment found its appropriate vehicles. Hence, much of the Church Music written during the seventeenth century definitely assumes a more or less dramatic or picturesque character, interpreting the words more closely than had been done before. In the hands of a great master such as Purcell this could be done without sacrifice of due dignity and decorum; in those of lesser practitioners it degenerated into the frivolous and superficial music satirized in a famous line of Pope, and as the popular Italian opera steadily degenerated into a mere

mechanical entertainment, so it pulled down much of the Church Music with it.

In the early part of the eighteenth century especially the music of the Mass was as frivolous and as undignified as that of the current operatic song from which, indeed, it was commonly undistinguishable. No doubt there were exceptions: the pure melody of Scarlatti, the sculptural counterpoint of Leo and of Sarti (whose pupil, Cherubini, carried his style to France), but they remained exceptions, and had little or no influence. In England the standard of sacred music was held aloft by Handel, but Handel wrote little for the actual service of the Church and his oratorios fall somewhat outside our present purview. The English Church composers, Greene, Boyce, Battishill and others, kept a tiny flame alight, but it was too uncertain to give any lasting illumination to the general course of Church Music. The true reform came from Germany. Schütz's Passion Music is a landmark in the history of the art; after him came the stupendous genius of J. S. Bach, who brought German Church Music to its climax with his settings of the Passion, his Mass in B Minor, and the Church Cantatas (over two hundred in number), which he wrote for the successive Sundays of the Christian year.

During the Viennese period a good deal of the Church Music was written for the private chapels of noble and wealthy patrons and shared to some extent in the prevalent idiom of the time. The Masses of Haydn, for all their wealth of innocent melody, have now been excluded from the actual service of the Church; of Mozart's Masses only two, the Wedding Mass and the Requiem, retain their place, the others are comparatively slight and perfunctory; Beethoven wrote two Masses, the second of which in D Major may take rank by the side of Bach's masterpiece, but he showed on the whole little interest in service music; and Schubert, although he poured into the Mass, as into every other musical form, his inexhaustible gift of melody, is content to decorate an office for which he shows little sympathy or understanding.

Here may be interpolated a brief note on the history of Church Music during these centuries in Eastern Europe. The Byzantine system, to which allusion has already been made, spread with varying uses through the countries of the orthodox Church and in most of them has shown but little advance or alteration up to the present

day. In Russia, however, the history is somewhat different. The Church Music of that country is said to have been much influenced by the work of Ephraem the Syrian and may, perhaps, be said to take its origin from the conversion of Vladimir I in the seventh century. For about one thousand years it maintained a system of melodic music without harmony and without mensuration, adopting for its purpose a primitive notation called "kriuki," analogous to "numes," which preceded Western music in Western Europe. In the seventeenth century polyphonic singing was introduced into Russia and an important School of Church Music was founded at Kief, from which, indeed, the new notation took its title. There was a further reform of Church Music led by Beresovsky (1745-1777) and Bortniansky (1751-1825), both of whom, and especially the latter, did much to organize and develop Russian music. In recent times some of the modern Russian composers, e.g. Rimsky-Korsakov and Tchaikovsky, have made contributions to Church Music, but the strict conservatism of the Russian Church has made innovations and even accessions comparatively rare.

During the eighteenth and early nineteenth centuries there was a considerable advance in Spanish Church Music. The revival was due mainly to Rabassa (d. 1740), after whose time a division arose between what are called the Valencian and the Catalan Schools. The former represented the old strict tradition of pure counterpoint and was represented chiefly by Fuentes, Soler, Ripa and Cabo, the last of whom died in 1832. The latter followed the modern romantic and dramatic methods and its chief adherents were Nebra, Secanilla, Altarriba and Pons, the last of whom died in 1818. Garcia, who is sometimes classed with the Catalan School, belongs to it rather as a colourist than as a dramatic writer.

Some of the same distinction may be observed in the French Church Music of the nineteenth century. Secularized on one side by Rossini, on another side by Gounod, it was at one time in danger of falling under the control of composers who regarded the organ as a vehicle for brilliance and the Mass as a sort of fashionable Church parade. From this it was in great measure rescued through the work of the Schola Cantorum, founded in 1896 by Bordes, Guilmant and Vincent d'Indy, which has been ever since the stronghold of classical Church Music in Paris. César Franck, who stands to French music somewhat as Garcia did to Spanish, holds a separate



MOZART AT WORK ON HIS LAST COMPOSITION.



A CONCERT AT HAYDN'S.

By A. ROSIER.

position of his own and uses his gift of vivid colour in the same spirit as the illuminator of a missal.

The Romantic movement, which occupied so much of the field during the nineteenth century, had comparatively little effect upon Church Music. Berlioz' gigantic *Messe des Morts* treats its theme far more as a pageant than as a religious service; Mendelssohn, the most classical of the Romantics, is mainly represented in this context by his oratorios; Schumann's one Mass is the work of a tired man and his Requiem, now unjustly neglected, is for all its beauty too slender to make a tradition; Liszt, much of whose music is sheer virtuosity, rose to a higher level in his *Graner-Messe*, but did not sufficiently maintain it: the noblest outcome of the modern German School is to be found in the Requiem and motets of Johannes Brahms.

Meanwhile, however, another disease was invading the Church Music of Western Europe, sown by some of the Romantic writers and sedulously fostered by their weaker imitators. At the beginning of the century Spohr was setting a fashion of soft and sensuous harmony, which was superficially attractive and became widely and immediately popular. His mannerisms were, unfortunately, easy to copy, as, indeed, were many of the catchwords of the Romantic School, and there arose, especially in England, a method of Church composition which made no higher appeal than that of facile prettiness and cheap sentimentalism.

Against this stood out the two distinguished figures of the Wesleys, father and son, but when S. S. Wesley retired from composition there was no one strong enough to stem this shallow and pervasive tide which overspread English music with poor melody and stagnant harmony, until the whole of our Church Music was in danger of being submerged. Our Church composition during the third decade of the nineteenth century represents perhaps the lowest level of musical art that we have ever attained. From this the country was rescued by the Renaissance, which began about 1880 with Parry and Stanford and has continued with increasing progress under Elgar, Vaughan Williams and others to the present day.

The pioneer of national Church Music in America was Lowell Mason (1792-1872), famous both as an organist and as a hymn writer; an important step forward was taken by the establishment of

the American Guild of Organists in 1896, and in later years Parker, Whiting, Mrs. Beach and others have written Church Music which possesses some real distinction and gives high promise for the future of American art.

The chief problem of Church Music is that of reconciling the dignity of the service with the particular idioms of succeeding generations. On the one hand, it is maintained that to follow the rapidly changing course of musical language is to invite colloquialism and to introduce a secular tone into worship: the Mass is still presented in Latin, the Liturgies of Germany and of Eastern Europe are still uttered in the phrases of old and traditional speech; in England and in English-speaking countries the archaic language of the Bible and the Prayer Book is an essential part of their appeal: music, it is urged, should follow this analogy and keep itself as far as possible from the common currency of the market place. On the other hand, it is urged that the musical part of the Service has a special power of touching and attracting the sympathies of the congregation; it is not right that these sympathies should be chilled by an obsolete or unfamiliar idiom, still less that the composers who arise from generation to generation should have to wait for some indefinite period before they are admitted to canonic rank.

For both these pleas there is much to be said. It is possible that both could be reconciled if the Church determines that under no circumstances would it open its doors to sentimentalism or frivolity or pedantic dullness; that it will insist on maintaining the music of its Services at the high level which it already claims for the words, and that it may then allow free admission to any music that can satisfy the requisite standard.

CHAPTER XVII

CHRISTIANITY AND THE ART OF WORSHIP

BY THE REV. CANON R. G. PARSONS, D.D.

The age-long endeavour of man to fashion forms of worship which shall more and more adequately express the realities of religion as he comprehends them.

IN the three previous chapters, Christianity has been considered in its relations with the various realms of art, literature, music, architecture, sculpture, painting. There remains for consideration yet another of its artistic achievements, which does not indeed admit of being regarded as a distinct realm of art, in the sense in which architecture, for instance, is distinct from music, for all the arts have contributed to its development. It may, nevertheless, be regarded as an art, because it is a quite definite effort to create forms which shall be the appropriate expression of those visions, longings and convictions, those living realities in the soul, which are the inward essence of a religion. It is this creative activity which we may call the "art of worship." To enshrine it the great churches of Christendom were built.

To a number of sincerely religious people, the very phrase "art of worship" will sound strange and irritating. If by "worship" we mean the conscious converse of the soul with the God in whom the soul believes, this is, they would argue, of so intimate, so spontaneous, and so indefinable a nature, that it is impossible to hold that there can be any "art" about it. But the very fact that there exists such a variety of forms and methods of worship, both private and public, is itself evidence that there are better and worse ways of giving expression to man's converse with the Divine, and that it is a legitimate and indeed inevitable activity of the religious life of man to endeavour to fashion forms of worship which shall more and more adequately express the realities of religion as he

comprehends them. It is this age-long endeavour which we are describing when we speak of the art of worship.

Every religion has fashioned for itself a "cultus," an outward expression in rites and ceremonies of its inward essence. The purpose of the cultus is partly educative; it serves to impart to the younger and less experienced members of the religious community the stored up treasures which are its common inheritance, and also continually to remind all believers of what are held to be the essential verities of their religion; this is its manward aspect. But the cultus is much more than this, it has a Godward aspect as well, what we may call its devotional purpose; this is nothing less than to actualize and make vividly real some definite relationship between the worshippers and their God. What that relationship is, and by what means it can be actualized, depends on the nature of the religion. Whether it be primitive and barbaric, or whether it be one of the higher religions of the world, it is clearly the concern of those who profess it to see that the cultus is maintained in such a form as to be an adequate means for its double purpose, educational and devotional. This is or should be the dominating aim of all who are concerned with what we have called the art of worship.

The great period of scientific and historical research in which we are living has busied itself with inquiries into the origins of the religious customs of mankind, and traced their growth from rude beginnings, through all the stages which have led ultimately to the highly developed systems of the great religions, in whose cultus poetry and music, symbolic and dramatic ceremonial, architecture, sculpture and painting play their appropriate parts. The comparative study of Religions, with the help of its sister science Anthropology, has thrown a flood of light on the real significance of a multitude of obscure and curious religious customs, and has shown us how religions are related to each other by virtue of certain needs and experiences common to all mankind, and how they, all of them, naturally make use of rites and ceremonies in which striking similarities are to be found, even between religions which are nevertheless markedly different from one another. There is no religion which has not grown out of some other religion by way of development or reaction, and there is no religion which in the course of its history has kept itself wholly free from the process known as "Syncretism," that is to say, the tendency to assimilate, and use for



its own distinctive purposes, beliefs and practices which it has found existing in other religions with which it has been brought into contact.

Neither Christianity nor its parent stock, the religion of Israel, are exceptions to all this. The theology and the elaborate ritual and ceremonial of fully developed Judaism contain many elements derived from a number of different sources; Babylonian, Egyptian, Canaanite, Persian and Greek influences can all be traced in the religion whose history is recorded in the Old Testament. Yet this undoubted fact neither proves that there is nothing unique in the sublime monotheism of the Jews, nor that it had nothing to gain by making use of ideas and customs derived from other nations. Similarly Christianity in the course of its history has undoubtedly been influenced by the religions with which it has come into contact: first, that strange medley of cults with which it found itself face to face once it had set out to convert the Roman Empire; then, the religion of the barbarians of the North whom it next subdued; then Islam, which influenced the development of mediæval Western Catholicism by introducing to it Aristotelian philosophy in an Arabian form; later on, the Renaissance, which brought to bear upon it the rediscovered influences of the classical literature and art of Greece and Rome; and to-day, the efforts which all Christian communities are making to adjust themselves to the changed outlook of the modern world are but another instance of that "Syncretism" which in greater or less degree is an inevitable characteristic in the life of any really vital and dominating religion. And what has happened in the inner realm of thought has sooner or later found expression outwardly in altered forms of worship, in some change in the rites and ceremonies employed, whether it be by way of greater elaboration, or by some process of simplification and reform.

And so it has come about that Christendom now presents us with an amazing variety of forms of worship, the outcome of the diverse experiences through which its various communities have passed. It is difficult to imagine a greater contrast in cultus than that between a Roman Catholic High Mass and a Quaker Meeting. In the former, every word and every gesture is prescribed; the number of candles lighted, the shape and colour of the vestments worn, the very swingings of the censer are strictly regulated, and that not arbitrarily, but for reasons, either symbolical or practical;

the whole service is carried out with formal precision. In the latter, there is what has been described as "a formal absence of all form." The utter simplicity of the building; no furniture save the seats; the Friends sitting still and silent, waiting; no minister to lead the worship, no music, no action; no words spoken, save such as the immediate inspiration of the Spirit may lead any one of those present to utter. Yet for all their difference, each form of worship is intensely dramatic, each is a deliberate, communal effort to give expression to emotions and convictions which are essentially Christian; each teaches profound and abiding truths, each generates vivid and powerful spiritual experiences. And in each there is a very real artistry of worship, as well as a very real danger of most deadly formalism.

And between these two extremities of difference there are services of every type. An obvious method of classification is to range them under two headings: forms of worship which are liturgical (i.e. follow a prescribed form and order), and forms which are not. Liturgical worship is characteristic of the more conservative, historic and ancient Churches, those which are commonly called Catholic, while the Churches of the Reformation, with the notable exceptions of the Anglican Communion and the Lutheran Churches of Scandinavia, have shown a marked preference for freer forms of worship.

The Liturgies and Service Books of Christendom make up a sufficient body of literature to keep an expert student well occupied for most of his days. Liturgiology, or the study of the history and principles of forms of service, is a definite branch of theological science, presenting to the expert many intricate and fascinating problems. At the time of the Reformation, the whole of Christendom, except for some tiny communities, used carefully regulated forms for every occasion of public worship. Yet it is agreed by all that the worship of the primitive Church was characterized by the greatest simplicity and a notable freedom from rigidity of form. What brought about this transformation? The majority of the English-speaking Christians in the world belong to Churches which do not use fixed forms of liturgy for their ordinary public services. They find the liturgical worship of the Roman Catholic, Orthodox and Anglican Churches, if ever they have occasion to be present at it, somewhat strange and puzzling. The members of these

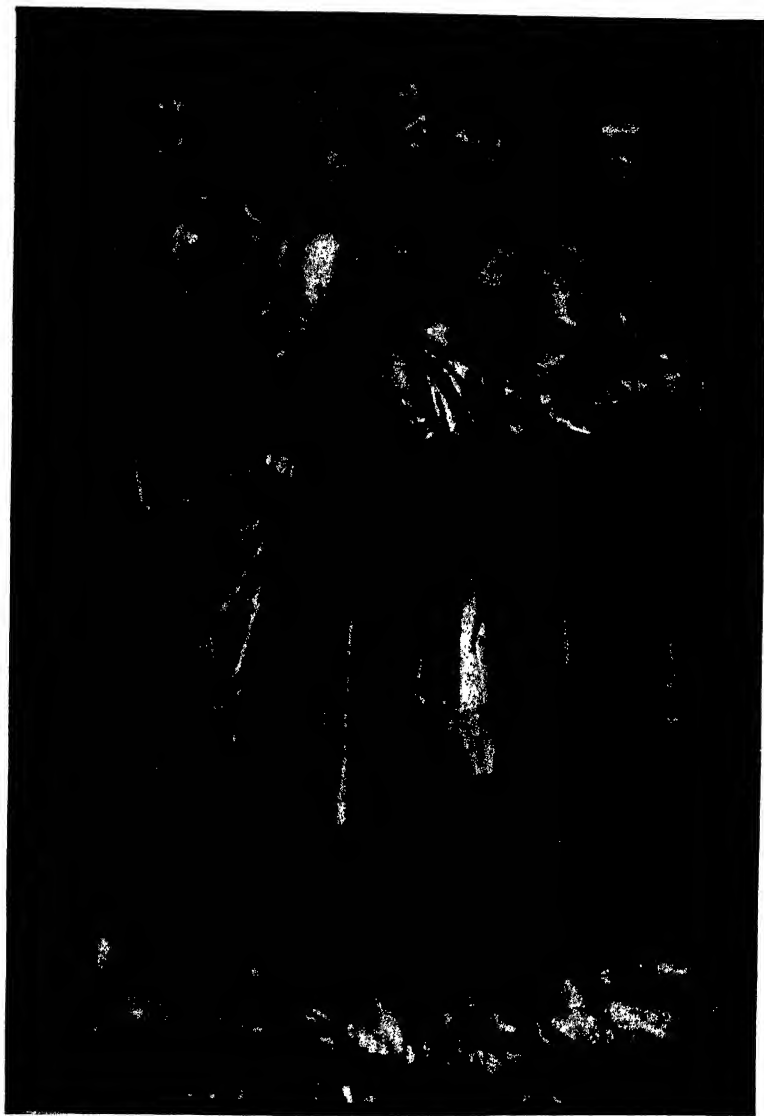
Churches, however, regard their ordered forms of worship as among the most priceless treasures of their heritage, which they hold in trust, not only for themselves, but for the whole of Christendom. And anyone who studies these liturgies will discover that they contain, along with a good deal that may seem to be merely archaic, fantastic, and even superstitious, countless passages of glowing devotion and mystical insight, cast in forms of haunting beauty and often of great dramatic power, which must secure for them, regarded simply as literature, an abiding place of honour among the artistic achievements of religion. How did they grow up, and how were they derived from the simple worship of the primitive Church?

Jesus Himself instituted only one distinctive rite of worship for the society of His friends, that rite now known to the Church under the names of the Lord's Supper, the Holy Communion, the Eucharist, the Mass. For Himself, when He instituted it on the night of His betrayal, it was essentially an act of supreme self-consecration and self-giving to God, and at the same time of utter self-sacrifice for the sake of mankind; at once an act of divine worship and of human service. In this it was a fitting and characteristic expression of that great principle of all His life and teaching, which is so constantly stressed in the Gospels, the inseparable connexion between the service of God and the service of men; for Him religion and morality are indissolubly bound together: love for God and love for men form an indivisible Unity, neither can be real and complete without the other. His words and actions as He took the bread at the Last Supper and broke it and gave it to His disciples, and blessed the cup and bade them share it, were at once a symbolical and dramatic expression of the significance and value which His approaching death had in His mind and purpose, and a means whereby His followers might themselves enter into a personal fellowship with Him in His self-sacrifice and all that it implied. For them, as they repeated it, in the light of their belief in His Resurrection and triumph, the Lord's Supper became an act of thankful Commemoration, in which they proclaimed their confidence in the liberating and atoning power of His Self-offering, and entered into intimate communion with Him, whom they believed to be still present among them, though invisible, still imparting to them the power of His sacrificial life of love and service to God and man.

The setting of the rite—a common meal—was essentially social, but the distinctive feature of the rite, the “ Breaking of the Bread,” stressed the conviction that only by sharing in the divine self-sacrifice of Christ in devoted service to the cause of the Kingdom of God, could men really love one another. This simple service, Christians believed, took the place of the traditional sacrifices offered by Jews and Gentiles. These were for ever superseded by the perfect self-offering of Christ, with which His Church was associated by its sharing in the Feast which He Himself had instituted to be its abiding memorial.

In addition to the Lord’s Supper, bequeathed to them by their Master, the primitive Christian communities inherited from the Jewish Mother Church a type of service with which the original followers of Jesus had been familiar from their childhood, whenever they attended a synagogue on the Sabbath day. This service consisted of readings from the Scriptures, interspersed with the singing of psalms, together with instruction, exhortation and prayers. Wherever a Christian community sprang up, it would hold such meetings on the weekly commemoration of the Resurrection, “ The Lord’s Day,” which for it took the place of the Jewish Sabbath. In addition to the Old Testament Scriptures, letters from Apostles would be read, and accounts of Christ’s life and teaching, as they come to be recorded in the Gospels; and Christian Hymns, some of which, such as the Magnificat and Benedictus, are in the New Testament, would supplement the Jewish Psalter. To these services outsiders would be admitted. Interested inquirers would by attendance at them become informed of the tenets of the new religion and learn something of its spirit. But not until they had been initiated by baptism into full membership could they be allowed to take part in the Lord’s Supper.

These two services, a service of instruction and a service of devotion, formed the nucleus of the Church’s system of worship. The fresh and overpowering experience of direct access to the love of God, through the grace of Jesus Christ and in the fellowship of His Spirit, found expression, not in set forms of rigid uniformity, but in what the New Testament calls “ freedom ” or “ boldness ” of speech. That this might easily degenerate into anarchy is shown by St. Paul’s First Epistle to the Corinthians, in which he is at pains to regulate the unseemly occurrences which disfigured the assemblies



PART OF THE FAMOUS SINGING GALLERY CARVED BY LUCA DELLA ROBBIA FOR THE CATHEDRAL AT FLORENCE.



JOHN MILTON.



BISHOP KEN.



ISAAC WATTS.



A. M. TOPLADY.



WILLIAM COWPER.



BISHOP HEBER.



JOHN BOWRING.



H. F. LYTE.



FRANCES HAVERGAL.



D. L. MOODY.



IRA D. SANKEY.



BISHOP WAI SHAM HOW.

TWELVE NOTABLE HYMN WRITERS.

of his converts in Corinth. These were due in part to the uncontrolled exuberance of those who "spoke with tongues" and "prophesied" at the service of instruction, and in part to the greed and unsociable behaviour of some of those who partook of the Lord's Supper. Convinced that "God is not a God of disorder but of harmony," the Apostle laid down two principles: "Let all things be done decently and in order," and "Let all things be done for edification." It has sometimes been forgotten that the primitive conditions of worship prevailing at Corinth were not regarded by him as by any means satisfactory, and that the more systematized ordering of the life and worship of the Church which we can trace in the later portions of the New Testament was made in conformity with the ideals of the great champion of Christian liberty.

The Lord's Supper was originally celebrated as the solemn climax of a community meal, known as the Agapé, or Love-Feast. This arrangement, reproducing the procedure at the Last Supper, continued through Apostolic and Sub-Apostolic times. But early in the second century, a very notable change was brought about. Partly no doubt owing to dangers of irreverence such as St. Paul had had to deal with at Corinth, but partly also to the desirability of consolidating the little groups of Christians, which had hitherto met in various houses, into central congregations in each locality, that unity of doctrine and discipline might be safeguarded, the sacramental rite of the Breaking of the Bread was separated from the Love-Feast, and attached to the service of instruction. Love-Feasts continued to be held, as signs of Christian social fellowship, but fell into the background and finally disappeared. The centre of interest from now onwards became the central service of instruction, prayer and praise, derived from Judaism, culminating in the Eucharist, ordained by Christ.

By the time that this important change had been carried through the control of the common worship of each local church had come to be vested in a single presiding minister or "Bishop," and these Bishops became the guardians and transmitters of the Church's tradition of worship. If we compare the principal characteristics of the various ancient liturgies—which took definite written shape from the fourth century onwards—with what we can gather as to the nature of early Christian worship in such writers as Clement of Rome (c. 96 A.D.), Justin Martyr (c. 140 A.D.) and later on

Irenaeus in Gaul, Clement of Alexandria in Egypt, and Tertullian in Africa, we are drawn to the conclusion that the different types of rite which later come to distinguish the different parts of ancient Christendom are all alike developments from a common stock, a primitive order of worship, which may well be derived, as Clement of Rome asserts, from general regulations laid down by Apostles.

This would appear to be especially probable with regard to the great Thanksgiving Prayer of the Eucharist, which corresponds to the "giving thanks" of Christ over the Bread and Wine at the Last Supper. The words He then used are not recorded in the Gospel. It is probable that He would use a prayer corresponding to the "Blessings" used in the Jewish ritual for sacred meals. What are commonly called the "Words of Institution" were not, of course, originally His formula of consecration but His words of administration. Certain, at any rate, it appears to be, that behind the earliest known liturgical forms, there must have been a yet more primitive outline Prayer of Thanksgiving beginning with the familiar "Sursum Corda," "Lift up your hearts," and rendering praise to God, for Creation and Preservation, for His guidance under the old Dispensation, and, above all, for the redemption wrought by Christ; this led on to a thankful Commemoration of His work for man, in which His institution of the Eucharist was included, along with His Crucifixion, Resurrection and Ascension. Whereupon, the Bread and Wine were offered to God, that He might bless them for His holy purpose, and the Grace of the Spirit was invoked, that the worshippers might make a good Communion. The later Consecration Prayers, derived from this ancient form, came to stress different elements in it; in the East, the invocation of the Spirit ("epiclesis") was elaborated, and came to be considered the formula of consecration; in the West, the words of Institution became the climax. But in the early stages there were no such definite theories; God was simply believed to consecrate the elements in answer to the Church's prayer.

The Bishops, though following the same order of service, at first undoubtedly used "extempore" prayers, according to their discretion, throughout its course. But gradually the way in which they ordered the worship came to be more and more stereotyped. Local churches not unnaturally followed the ways which commended themselves by usage in the principal centres, Antioch, Alexandria

and Rome, to one or other of which almost all of them would look for leadership and guidance. And so there grew up the three main types of ancient Eucharistic liturgy, from which are derived the three families or groups of rites and ceremonies into which liturgiologists are agreed in classifying the ancient traditional services: the Antiochene, or Syrian; the Alexandrine, or Egyptian; and the Western. From the first is derived the Byzantine rite, the Liturgy of the Church of Constantinople, which by about the twelfth century had superseded the older Antiochene and even the Alexandrine rites throughout the Orthodox Communion. Translated into Russian (old Slavonic), Serbian, Rumanian and other languages, it remains to this day the liturgy of the Eastern Orthodox Church. Of the Western Group of liturgies, the most famous is the Roman Mass; but like the Byzantine Liturgy in the East, it is but one of a number of liturgies which in earlier days were used in Western Christendom. These other Western Services, in certain features markedly different from the Roman, are usually, though somewhat misleadingly, called "Gallican." They prevailed not only in Gaul, but in Northern Italy, in Spain, in Africa, in Britain and Ireland. The Roman Rite was originally merely the local rite in use in the Church at Rome and in its neighbourhood.

Opinions are still divided on the question of the relationship of the Roman Rite to the originally far more widespread "Gallican" Rites. Many scholars hold that its marked differences from the ancient forms are due to an amalgamation, affected about the middle of the fourth century, between the earlier Greek Liturgy of the Church of Rome, which remained still in use up to about that time, and was probably akin to that of Alexandria, and a Latin Liturgy, similar to the other Latin ("Gallican") liturgies of the West, which had more recently come into use at Rome. In any case, the central and most important part of the Roman Mass, the "Canon" or Consecration Prayer, shows unmistakable signs, even in the opinion of Roman Catholic scholars, of having been re-arranged, and in some respects dislocated, at an early date. In this curious form—unique among the ancient liturgies of Christendom—it has survived practically unaltered as regards its wording from the fourth century to the present day. The Roman liturgy gradually ousted the other types of service which had grown up in the West, and by the early Middle Ages had become, with negligible variations, the rite in

universal use in Latin Christendom. To-day liturgies of "Gallican" type remain in use only at Milan (the Ambrosian Rite), and in Toledo and Salamanca (the Mozarabic Rite). But in the liturgies of the Anglican Communion—notably in those of the Scottish and American Episcopal Churches—some interesting Gallican characteristics have been revived, as well as features adopted from the Eastern rites.

Space forbids that we should describe the development of the many liturgical services other than the Eucharist with which the ancient Church richly supplied itself. Chief among these were those known as "the Divine Service," consisting of various daily offices. The main purpose of these was to secure the regular reading of the whole of the Scriptures and the recitation of all the Psalms. From these offices are derived the familiar Morning and Evening Prayer of the Anglican Churches. And of course there were also the "Occasional Offices," for the special occasions of a Christian's life, such as Baptism, Marriage, Burial, and the various episcopal functions of Confirming, Ordaining and Consecrating.

We must pass from this brief account of the development of the "ritual" of the ancient Churches—that is to say, of the prescribed form and order of words to be used in their various services—to consider their "ceremonial," that is to say, the visible actions, gestures and movements which accompany the ritual, and often imply the use of various "ornaments of the Church and of the Ministers thereof." All through history the majority of mankind has shown itself more easily affected by the visible than by the audible elements of the religious cultus. Priests of every religion have discovered that the less educated masses of the people respond more readily to the stimulus afforded by visible and dramatic actions—living pictures—than to the bare uttering of words. There is, indeed, something dramatic about the simplest and most universal external accompaniments of prayer, such as kneeling down, or lifting up the hands. The Salvation Army realizes the value of a very marked form of ceremonial, no less than the Roman Catholic Church; and Protestant Churches which have reduced their ceremonial to a minimum are discovering that a Missionary Pageant will often bring home to their people the value and necessity of evangelizing the heathen more effectually than the most powerful sermon. But ceremonial has not only an educative value, it has also a



THE CHRISTIAN RELIGION AS LEADER OF THE ARTS.

By J. F. WERBECK.



THE TRIUMPH OF THE CHURCH.

By RAPHAEL.

devotional. It is the expression of the innate conviction of the soul, that the world of beauty is intimately associated with the Divine, no less than the worlds of truth and of goodness; it is an attempt to consecrate to the service of God the glories of colour and form and movement, that they may become expressive of man's highest aspirations, and a stimulus to his profoundest intuitions.

The most striking developments of ceremonial from which the liturgical Churches of to-day derive the greater part of their heritage of traditional customs began with the recognition of Christianity as a legitimate religion by the Emperor Constantine. But earlier than this, ceremonial elaboration had no doubt begun, partly through the increasing influence of the Old Testament, and the tendency to make the worship of the New Covenant correspond with that of the Old, as the fulfilment and reality of that of which the earlier worship had been the shadow and type; partly through the natural tendencies of Gentile converts, who had been familiar with the dramatic and symbolic ceremonies of the various Mystery Cults. From the first it must have been obvious to teachers like St. Paul, on the one hand, and any intelligent convert on the other, that there were similarities and points of contact between the Sacraments of Baptism and the Eucharist, and the rites of some of the Mystery Religions. But it is extremely questionable whether the Sacraments of the Gospel, as we see them in use in the New Testament, were appreciably influenced by pagan rites. In the second and third centuries such influences no doubt increased with the number of converts from paganism.

But when once Christianity became established as the Religion of the Empire its ceremonies began to develop apace. The Galilean had conquered, and proved Himself King of Kings and Lord of Lords. If lights and incense were used in honour of the Cæsars, who impiously had claimed to be the embodiment of Absolute Power, how much more right had Christians to use these signs of worship in honour of their exalted Lord, invisibly among them at His mystic Feast? Should not the ministers of the Heavenly King be vested as gloriously as those of the pagan gods? So the immemorial adjuncts of worship came to be used by Christians, and the ceremonial of the palace of the Byzantine Emperors was transferred to the services of the Church of the Nazarene. If, in the Eastern Rites, lights and incense and a procession of honour attend

the Gospel book and the Eucharistic bread and wine, as they are brought to be set upon the Holy Table, this reverence is intended, not for the book as such, nor for the unconsecrated elements, nor for the ministers who bear them, but for the Christ Himself, coming among His own, to proclaim the Eternal Gospel, and to celebrate His Sacrificial Feast. The Ceremonial of the Latin Rite came in the Middle Ages to stress other parts of the service, and especially the action of the Consecration Prayer. Christ's Words of Administration came to be regarded as the formula of Consecration, and the introduction of the ceremony of elevating the Host at this point in the Canon in the twelfth century printed in the imagination of the people, more vividly than any argument, those doctrines of Transubstantiation and the Sacrifice of the Mass which are so fundamental in the worship of the Roman Catholic Church.

These instances are given, not to approve or to condemn the beliefs of which they are the expression, but to throw light on some of the processes which have been operative in the development of the traditional cultus inherited from far-off ages, but still in wide use in Christendom, and beloved by many millions of Christian people. And whether we agree with those who value these ancient forms of service or not, we cannot but be impressed with their immense power.

At the Reformation, forces were set in motion which moved large bodies of Christians to seek to reproduce in their own age the simpler and freer ways of worship which characterized the primitive Church. The Reformers were determined to be ruled by the Bible and the Bible only, whether, with the Calvinists, they refused to permit in worship anything which was not definitely prescribed in Scripture, and so banished organs as well as many other instruments of beauty, or with the Lutherans, they followed a more liberal rule and permitted anything that was not expressly contrary to Scripture, provided it was thought to make for edification. History undoubtedly teaches us that rites and ceremonies once luminous may, with the passage of time, become so obscure, that they do "more confound and darken than declare and set forth Christ's benefits unto us." But the moral of this is not that we should be careless about them, but take the greatest care so to fashion the outward expression of our worship in rite and ceremony, that it is worthy of our inward experiences and beliefs. Ugliness and

slovenliness are as unworthy of a living religion as formalism and theatricality; and freedom from liturgical worship does not necessarily mean freedom from convention.

There seems to be an increasing number of Christians in the world to-day who need more than one type of worship for the satisfaction of their souls. Churches with a strong liturgical tradition are learning to provide freer and less formal types of service as well, while there are signs of a movement toward the revival of liturgical forms in Churches which had for long discarded them. But the chief concern of those who would maintain a living type of worship in modern Christendom is not so much to reproduce the rites and ceremonies of bygone ages, however beautiful they may be, as to create for the needs of our own age forms of like loveliness and power, which shall do for those who cannot but live and think according to the conditions of our times what the venerable liturgies of past ages did for men whose lives and thoughts were so profoundly different from ours, though their deepest needs and longings were the same. To this end a sympathetic understanding of the ancient forms of worship is indeed necessary, and modern psychology is opening our eyes to much instinctive wisdom in their methods. But mere traditionalism and mere modernism are alike incapable of creative art, and the Church, if its worship is to be worthy of its faith, must bring forth out of its treasure things new as well as old. Nor can we ever afford to forget, as we have recently been reminded, that "there is a danger, on the one side, of the degradation of Art to a mere instrument of Edification; on the other, of the substitution of Art for the worship in spirit and in truth, to which it may minister, but which it cannot replace."

BOOK V

THE NEW PERSPECTIVE

Christianity is a religion vitally concerned with history; the Bible contains an historical record extending through many centuries and covering many lands. What has scientific investigation to tell us about these same centuries and lands? What has archæology to tell us of the Bible itself? As an ancient Book it is inescapably a proper subject for comprehensive critical study, and faith can rest secure only after every legitimate test has been applied to it.

Chapter XVIII. THE DISCOVERIES OF ARCHÆO- LOGY IN EGYPT AND BABY- LONIA

XIX. EXPLORATION AND ARCHÆO- LOGY IN PALESTINE

XX. THE CRITICISM OF THE OLD TESTAMENT

XXI. THE GREEK OF THE NEW TESTAMENT

XXII. CRITICAL STUDY OF THE NEW TESTAMENT

XXIII. THE COMPARATIVE STUDY OF RELIGION

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XXV. THE NEW PERSPECTIVE IN THEOLOGY

XXVI. IMMORTALITY

CHAPTER XVIII

THE DISCOVERIES OF ARCHÆOLOGY IN EGYPT AND BABYLONIA

BY PROF. GEORGE A. REISNER, PH.D.

To the archæologist every ancient relic is a "document." Some of these are of course immeasurably more important than others, but even unpromising material may yield much information in the hands of a skilful and patient investigator.

ARCHÆOLOGY is ordinarily associated in the mind with the idea of a museum of antiquities. It may be a well-ordered modern collection with the objects so arranged as to tell the story of the past, or as in my own experience fifty years ago, a few dusty cases of Indian curiosities, mostly flint arrow-heads, arranged according to their shapes and colours. But objects in cases are only the dry bones of the science of archæology, no matter how well arranged, and of comparatively little value unless the date, the place of discovery, and the associated evidence have been accurately recorded. The purpose of the modern field-archæologist is not merely to obtain objects which may be placed in a museum, nor to expose the buildings left by ancient races, but to recover all the historical evidence which is contained in an ancient town or cemetery, and to utilize this evidence for the reconstruction of the history and the daily life of the peoples of past ages.

Every ancient city or cemetery discovered is represented by an accumulation of deposits, that is to say, an archæological formation, a result partly of man and partly of the action of natural forces. Men build houses and temples and city walls, and occupy them for generations, filling the rooms and courts with the utensils of daily life, the inscriptions, the statues, and all the apparatus of administration, industry, and commerce. As the decades pass, the great public buildings with their massive walls endure, and their floors

remain on the old level, but the poorly built shops and residences decay and are replaced by newer shops and residences built over the ruins of the older ones. Thus the city surrounding the great buildings is continually being renewed, not as a whole, but house by house. It rises on the *débris* of its own decay until the levels of the floors lie high above those of the temples and palaces. Some great catastrophe overwhelms the city—war, pestilence, earthquake, or a change in the trade routes or in the conditions of commerce—so that it is destroyed or abandoned. Its walls disintegrate and bury their lower parts in their own *débris* of decay, laid down by wind and weather. An accumulation of this sort, provided no later city or cemetery is constructed on the same site, may be called a simple archæological formation.

But often after a few months or, it may be, a few generations, a second city comes to be built on the ruins of the first, and this invariably causes more or less destruction of the buildings and the deposits of the first city. First of all, levelling operations will have been undertaken which cut down the old mound. Often the better building-stones of the old walls are removed for use in the new walls, thus destroying to some extent the very skeleton of the older city. Foundation trenches have to be dug which, in the case of the great public buildings, cut through all the old deposits and introduce later objects into the earlier levels of the old city. Once constructed, the second city follows the life history of the first, and thus each successive city built on the old site adds its series of constructions and increases the damage done to the older accumulations.

City mounds containing two or more successive settlements may be designated as complex formations. In the same way, an ancient cemetery may consist of tombs of one period only, in which case it is called a simple formation, or like the great cemetery of King Cheops at Giza it may consist of several cemeteries made on the same area and be known as a complex formation.

Now whether an ancient accumulation be simple or complex, whether it be a city mound or a buried cemetery, the archæologist of to-day sets himself the task of taking it apart and analysing it, in an order the reverse of that in which it was built up. In a simple formation the process is comparatively easy, but in a complex site, and especially in a complex city mound, the excavation and inter-

pretation of the evidence is a most difficult task. For in that case the differences in level between the stationary public buildings and the last stage of the growing residential quarters, together with the destruction of the older remains by the later cities, will have resulted in a complicated accumulation of deposits, some horizontal, some vertical, and some laid on a slope.

The archæologist searches for evidence of the history of the site. Only by isolating each one of the structures and deposits, and by fixing the relative dates of each, can he hope to discover the chronological series of events which have produced the accumulation. He is most interested in dated groups and in chronological series of dated groups, for it is from such series that he reconstructs knowledge of the arts and crafts, the manners and customs, the religious beliefs and the culture of each period, and deduces the development of all these phases of life through the ages. Only by means of such chronological series of archæological groups can the historian determine the causes of the growth and the decay of civilizations.

Thus archæology is that branch of historical research which takes as its material the physical evidences left by man in or on the surface of the earth, constructions and excavations, cities and cemeteries, and all that may be found in or about them. This material includes vessels, implements, weapons, sculptures, paintings, inscriptions, personal ornaments, clothing, mats, baskets, the bones of men and animals, and indeed every visible trace of human activity and human existence. As a branch of historical research, archæology is mainly concerned with chronological series of facts and the causal succession of events, and must therefore use some sort of chronological skeleton according to which the observed facts can be fixed in time. As far as possible, all such chronological skeletons are interpreted in terms of our modern calendar which, taking as zero the point in time assumed for the birth of Christ, affords a means of counting indefinitely backwards and forwards in terms of solar years. The various eras and the calendars of antiquity have been fixed as accurately as possible according to this modern skeleton. The dates B.C. of the reigns and the dynasties of Egypt and Mesopotamia have been worked out by comparison of ancient documents with one another. Dates have been determined with

reasonable accuracy up to a point about 1600 B.C. in Egypt, and about 1800 B.C. in Babylonia. Beyond these points, in both countries, gaps occur in the documentary evidence, and although the names of kings and the lengths of their reigns are known for long periods in the preceding ages, the length of these gaps is still undetermined.

For example, in Egypt dates are well fixed to the beginning of the New Kingdom (1600 B.C.), but the length of the period between the end of the preceding Middle Kingdom and the beginning of the New is so uncertain that the dates for the Middle Kingdom can only be stated with an allowance for error amounting to a hundred years. Between the Middle and the Old Kingdoms, again, falls a gap of indeterminate length, and we reach the reign of Menes, first king of Dynasty I, with an uncertainty amounting to plus or minus three hundred years. Thus with all proper reserve, one should estimate the reign of Menes at between 4000 and 3400 B.C. Similar conservative calculations for Babylonia reach much the same vague period for the earliest documented reigns of that land. In both cases further discoveries in the next few decades will probably bring greater exactitude.

The major part of the existing archæological material in the case of Egypt has been provided for us by the dominance of an idea which was basic in the thought of the ancient Egyptians, the belief in the continued existence of the individual in a spirit-form after the death of the body.

The spirit-form, the *ka*, was supposed to have the same physical necessities and desires as the man on earth, and a happy life in the other world required that the *ka* be supplied with food, drink, bedding, clothing, ointments, personal ornaments, weapons, tools, implements, utensils, pleasures of the field and the chase, the associations of family life, and the rank and honours to which the man had been accustomed. Unless some means were found of providing these things, then the soul would suffer hunger, thirst, and deprivation through endless time, or perish miserably. The obvious means was to place in the grave with the body the objects actually used by the man in his daily life, together with a supply of bread, beer, and meat.

Very early in the history of Egypt cheap models began to be substituted for actual objects. It was believed that by means of

these models effective spirit-forms could be created for the use of the *ka*. Another means, the use of which was probable in the earliest times and is proved for all dynastic periods, consisted of periodical offerings of food and drink. These were brought to the grave-side, and magical formulas were spoken to make the spirit-equivalents of the offerings available as sustenance for the spirits of the dead.

In Egypt, as in most other countries, every tomb had two parts—the underground burial chamber and the superstructure marking the place of the grave. In Egyptian practice the superstructure contained the offering niche, or “false door,” through which the *ka* passed to and fro, and before which the offerings were presented.

Without pausing on the details of the complicated evolution of the superstructure of the Egyptian tomb, we may say that in the Old Kingdom (3150 B.C. plus or minus 300 years, to 2600 B.C. plus or minus 200 years) the offering place, still containing the “false door,” had developed into a large room or series of rooms, on the walls of which were paintings or painted reliefs representing not merely the objects and supplies needed in the future life, but also all sorts of scenes from daily life—agriculture, pasturage, hunting, fishing, feasting, dancing, playing games, and the practice of all the arts and crafts. Towards the end of the Old Kingdom the models placed in the burial chamber also increased in number and complexity, and included similar scenes from life. This custom continued down to the end of the Middle Kingdom (1950 B.C. plus or minus 100 years). After that time, the spread of the Osiris religion brought in the use of magical objects, often inscribed with magical texts which secured the special privileges of the Osirian life after death for the dead man, but without omission of the prehistoric custom of placing the objects of daily life in the grave.

By reason of these burial customs the graves discovered reflect the life of the people. The more primitive the period, the more exact is the reflection. For, in later times, objects which had passed out of use and custom in daily life are found persisting in the traditional equipment of the grave. The presence of such traditional objects, made specially for the grave, blurs the reflection of the contemporary daily life with half-forgotten images of the useful objects of earlier periods. Yet even to the last the adherence to the old idea that life after death was like life on earth has left us a proportion of tombs furnished with objects used in the daily life.

If a grave is dated directly by inscriptions or indirectly by association with dated material, the grave and its contents will indicate more or less fully the character of the arts and crafts, the manners and customs, and the religious beliefs of the period. As other graves come to be found dated to the same period, our knowledge of the objects and facts connected with that time becomes more and more nearly complete; but often a single very large and well-provided tomb may furnish sufficient material for a satisfactory reconstruction. Such a body of material gathered from graves or buildings of one period of time, we may call "the archæological group" of that period.

If a series of such archæological groups can be constructed, each dated to a certain period, it is obvious that the series will run parallel to the chronological skeleton on which is written the country's history. Thus a second chronological skeleton is created side by side with the series of dated reigns; so that graves or buildings or deposits, of objects not dated by inscriptions mentioning the reign, may be dated by matching them with one of the acknowledged groups of this second chronological skeleton. Most experienced excavators in Egypt carry in the memory the details of the main archæological groups; with the first glance at a tomb they can name the approximate date—Predynastic, Early Dynastic, Dynasty III, Old Kingdom, Middle Kingdom, and so forth.

The importance of the series of archæological groups becomes paramount when the two great gaps in the Egyptian chronological skeleton are reached—one between the Old and the Middle Kingdoms, and the other between the Middle and the New Kingdoms. And when the historian is dealing with a race that never used writing at all, or with the primitive epoch of a nation before the people acquired the use of writing, the series of groups become the sole means of dealing with the chronological succession of facts and events.

The archæological material used in these series consists of the work of the hands of the common people—the potters, the masons, the weavers, the smiths, the flint-chippers, the stone-workers, and all such useful craftsmen. The knowledge possessed by these artisans, together with the manners and customs of the time, was





PART OF THE FRIEZE WHICH ADORNED THE TEMPLE OF TELL-EL-OBEID.



THE GREAT COURTYARD ON THE SOUTH-WEST SIDE OF E-DUB-LAL-MAKH, ONE OF THE CHIEF SHRINES OF UR, SHOWING THE STEPS APPROACHING THE ZIGGURAT.

handed down through the generations from individual to individual, from father to son, from master to apprentice. The passing on of the inheritance is a gradual process continuing year by year, month by month, and day by day. If we take the body of physical facts pertaining to one day in the life of a community, and compare it with the body of facts of the following day, there will probably be no difference observable. Generations may elapse before any marked variation is noted. The styles or fashions of a primitive community change very little from generation to generation, and the changes, when they come, are usually of a cultural character: those produced by the invention of the practical use of metals, the discovery of new beds of minerals, the unification of the tribes into larger political units, or the invention of some machine, such as the bow-drill, the weighted crank-borer for boring stone, the potter's wheel.

In the case of a community forming part of a more developed social organism, where styles and fashions as well as the growth and decay of technical ability are subject to more rapid changes, differences will be observable after a short course of years, and certainly after an average generation. Of the artisans whose work constitutes the body of facts of the "fixed day" (representing an ascertained date), some will still be living, some will have passed on their methods and traditions to their sons and apprentices, and some will have been supplanted by young craftsmen using new methods or new forms. Thus the body of facts of the later day will contain some items identical with those of the fixed day, some items similar to the earlier but visibly modified, and some unknown in the earlier group. But as a whole each of the two groups will be unique.

These principles may be illustrated by the work done on the chronology of Ethiopia. The Harvard-Boston Expedition excavated at Nuri and El-Kur'uw (below the Fourth Cataract of the Nile in the river's great Nubian S-shaped bend) the tombs of twenty-six kings of the Napatan Kingdom of Ethiopia, half of them previously unknown. It was certain that these constituted the entire line of the Napatan kings and that they had ruled in succession. The order of the first six was known, except for a few uncertainties, and in the case of the fourth, fifth, and sixth the correct dates of the reigns. The problem was to arrange the remaining twenty kings in chronological order. There was a tomb group for

each royal pyramid, representing a series of twenty archæological groups, each separated by about one generation from the preceding and the succeeding groups. A comparison of these groups on the basis of their resemblances and their differences led immediately to the determination of the relative position of each in the series, and therefore of the chronological order of the Napatan kings of Ethiopia. The beginning of the series was fixed chronologically by the known dates for the reigns of two early kings, Tirhaqa and Tanutamon, and a calculation of all known factors based on the average length of human reigns gave an approximate date for each king. Later, the pyramids of the kings of Meroë were excavated. (Meroë, sixty camel-hours to the south-east, succeeded Napata as the capital of Ethiopia.) The order of its kings was determined by a similar process, and their dates were calculated from another fixed point, the reign of Ergamenes, back to the end of the Napatan kingdom. The dates were found to be apparently correct to within ten years.

III

When the history of civilized man is traced into the past through mediæval Europe, the Byzantine and the Roman Empires, the Hellenistic period, and the ancient Greece period, the trail leads directly to the empires and the cultures which arose in the two great alluvial valleys, Mesopotamia and Egypt. Whether it is in Egypt or Mesopotamia that the earliest documents have been found is of secondary importance. No decisive evidence has been adduced of any influence of the one on the other during the early formative period of either, but the cultural influence of both on the ancient nations around the Mediterranean is clearly proved. It has been the joint work of philologists and archæologists to carry the history of these two countries back in a reliable chronological series to about 1700 B.C., and beyond that date to a dim past which may be safely estimated at 5000-4000 B.C.

Both of the ancient lands which formed the breeding-ground for the creators of the earliest civilizations were alluvial valleys presenting the largest and the richest agricultural areas of the ancient world. On either side of Egypt lay arid regions inhabited by desert nomads eking out a scanty living by means of domestic animals, grazed on the sparsely growing vegetation of the desert and yielding

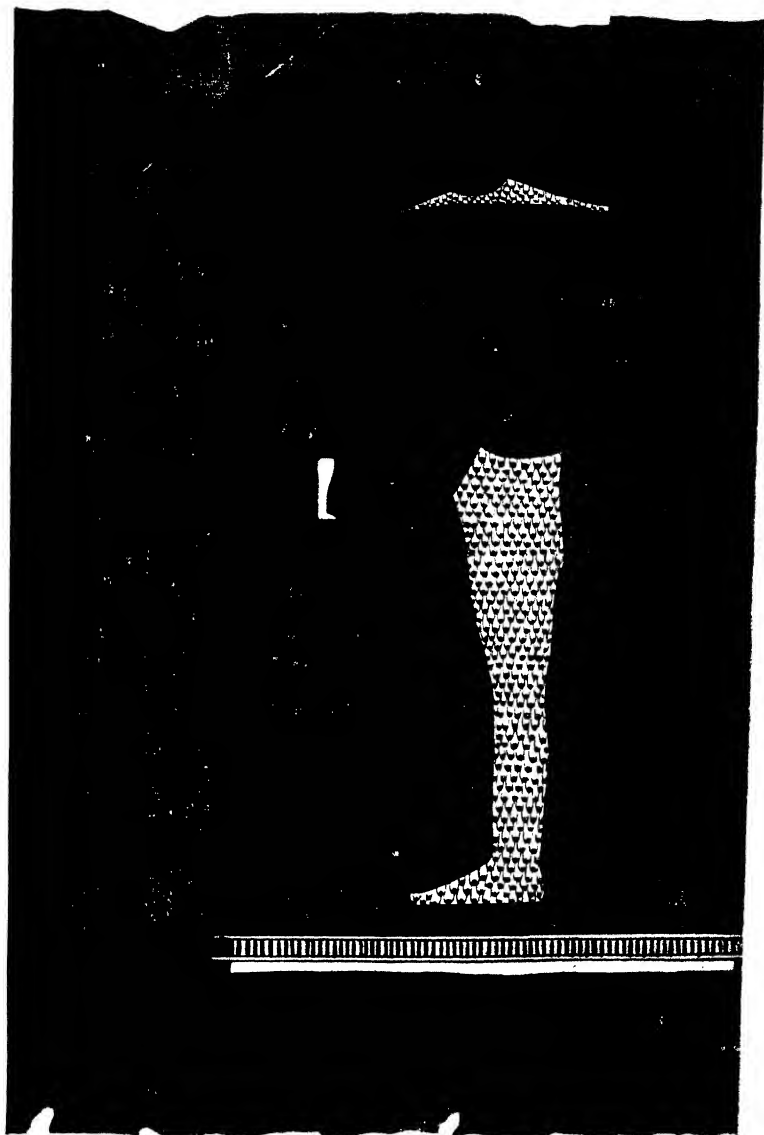
milk and hair. The desert nomad is, and always has been, a lean milk-fed man, caught in a merciless struggle for existence, prevented by circumstances, if not by race, from making any advance towards civilization. On the west of Babylonia lies an arid region, on the east a mountainous district only relatively better fitted for the rise of a native culture. But in the two valleys the yield of the rich soil was such that one man's labour would raise sufficient food stuffs to supply several families, and leisure was thus found by part of the population to engage in handicrafts and in trade, to plan a more comfortable existence, and devise means of obtaining it. In other words, it was agriculture which enabled man to take the first step towards the utilization of the resources of the earth—the attainment of power over its hard material which was to lead to the increasing control over time and space which marks our own age.

All archæological material may be divided into two great classes: those objects which are inscribed and those which are not. In both Egypt and Mesopotamia the material available in the early days of research consisted almost exclusively of inscriptions. The first great difficulty was the decipherment of the hieroglyphic writing of Egypt and the cuneiform writing of Babylonia, and the recovery of the two very different languages. Once the decipherment was accomplished, the translation of inscriptions began, and the utilization of their contents for the writing of history followed. Field-archæology in those days was devoted largely to a search for inscriptions, and secondarily to the recovery not of historical evidence, but of curiosities—statues, reliefs, coffins, mummies, jewelry—for museums and private collectors. It is only since about 1880 that scientific field-archæology has developed, and it has taken a very different course in the two valley lands.

In Babylonia the climatic conditions and other harassing difficulties have been so unfavourable that comparatively few expeditions could succeed in working continuously through long periods of time: the early British expeditions to Babylon and Nineveh, the Pennsylvania expedition to Nippur, that of Edgar J. Banks to Mugheir, and that of the German Oriental Society preceding the Great War. Since the land has become a mandated territory under the protection of Great Britain, two joint Anglo-American expeditions have been steadily active, both under archæologists originally trained in Egypt.

In Egypt, on the contrary, the pleasant winter weather, the proximity to Europe, and the enlightened policy of its rulers have promoted archæological research. Egypt's Service of Antiquities was founded in 1858, with a French scholar, A. E. Mariette, at the head, but it was not until Mariette was succeeded by another, a greater French scholar, Gaston Maspero, in 1880, that the policy was introduced of giving the excavator one-half of his finds. It was this policy which drew archæological expeditions to Egypt. Immediately before the Great War there were seven important foreign expeditions, amply provided with funds, working year after year in Egypt—two British, two American, one French, one German, and one Austrian. The Egyptian government through its Department of Antiquities was also carrying on excavations at several places under European archæologists. As a result of the co-operation and the mutual criticism of all these expeditions, and of Maspero's tendency to favour scientific work, methods of research in Egypt were developed to a point beyond those practised in other fields.

Another great point of difference between work in Mesopotamia and that in Egypt has been the character of the remains under examination. In Mesopotamia the excavations have been confined to city mounds far more difficult to excavate properly and yielding comparatively few of the common objects used in daily life. In Egypt city mounds and many great temples have been excavated, but the greater part of the work has been in the tombs of kings and nobles, and in the graves of the common people. In the dry climate of the Nile valley, wood and cloth, and even the organic tissues of the body, are often wonderfully preserved. Thus in Egypt a great body of archæological evidence has been added to that of inscriptions and become available for the reconstruction of history. In Babylonia research up to the present has been practically limited to the interpretation of inscriptions, and the history has not been carried back beyond the introduction of writing. But in Egypt the utilization of the archæological material has enabled us to trace the development of the Egyptians' civilization from a late neolithic state down to the culmination of their culture in the pyramid age, and on through all changes practically to the present time. The last generation in archæological research has belonged to Egypt; the next generation promises to give us a similar discovery of the cultural history of predynastic Babylonia.



A PAGE FROM THE BOOK OF THE DEAD.

In Babylonia palaces and temples of Babylon and Nineveh have been excavated, and similar structures at a number of ancient southern cities. The foundation-tablets and cylinders of many kings have been added to the European and the American collections, together with contract-tablets, letters both private and official, the accounts of the temple administrations, codes of laws, dictionaries, lists of kings, and royal archives with copies of the chief literary productions of the Babylonians. The written material is abundant and continues to increase, so that the historian has been enabled to reconstruct with growing certainty the political and the cultural history from the time of the invention of the cuneiform script.

The more ancient history is obscure, but our first view of the land shows a primitive civilization built up by a race which we call Sumerian—with organized monarchies, writing, and a system of measuring time by means of lists of the reigns of the kings, in which each year was named from some important event. Evidence has been found that later the Semitic tribes on the western and the south-western borders penetrated the country, overcame the Sumerian rulers, and absorbed the cultural elements of their civilization. In particular they adapted the cuneiform writing to the needs of the Semitic language; our knowledge of the Sumerian is largely drawn from the Sumero-Semitic dictionaries prepared by the scribes, and from the Sumerian hymns and magical texts with interlinear Semitic translations. The political and the religious history of later times, the manners and customs of the people, are as fully known as it is possible for written words to reveal them. The main fact is that about 2000 B.C. a highly organized and civilized State had been built in Mesopotamia, and this State was about to enter on a career of foreign conquest which was to make Babylonia, and then its Assyrian colony, one of the two dominant cultural agents in Western Asia.

In Egypt the inscriptions have not been so numerous as in Babylonia, but they have contained richer material. A great series of funerary texts have been discovered—the pyramid texts, the Middle Empire coffin texts, and the various recensions of the Book of the Dead. Likewise the offering-formulas attached to the "false-doors" are peculiarly Egyptian, and to these must be added the biographies of the dead carved on the walls of the offering-chapels and the scenes from daily life with their explanatory inscriptions. But

most important of all, the historian of Egypt has been furnished with a vast amount of archæological material recovered from the tombs, material which is lacking in Babylonia. Graves of the common people of Egypt have been excavated representing in practically continuous succession all periods from the neolithic period to Christian times, and a remarkable number of the tombs of kings, queens, and nobles. Almost all the tombs of great men had been plundered for gold, and many of the tombs of lesser men. But some of the original furniture has been obtained in almost every case. The tomb of Menes, the first king of Dynasty I, who thirty years ago still seemed a mythical character, has been excavated by J. DeMorgan and its contents placed in the Cairo Museum. So also the tombs of the remaining seven kings of that distant dynasty and two of the Second Dynasty have been identified by Professor Flinders Petrie and their contents placed in museums.

The two pyramids of Dynasty III at Zawiat-el-Aryan were excavated—the finished pyramid by the Harvard-Boston Expedition, and the unfinished pyramid by M. Barsanti for the Egyptian Government. Another and greater pyramid, that of King Zoser of Dynasty III, the “Step Pyramid” of Saqqarah, was identified early in the last century, and in 1924-1925, C. M. Firth was uncovering the “Beautiful Temple of Zoser” attached to that pyramid, executed by the first builder in dressed stone, the great architect Imhotep. The beautiful limestone masonry of its walls, the fluted columns, the papyrus and lotus columns, and the other architectural details have revolutionized our knowledge of the history of Egyptian architecture.

The pyramids and the royal cemeteries of Dynasty IV at Medum, Giza, and Abu Roash, with their temples, their statuary, their painted reliefs, their pottery and other objects, have been recovered by excavations, and now, in addition to the portraits of Zoser and Khasekhem of Dynasty III, the world possesses fourteen reproductions in stone of the kings of Dynasty IV, and at least sixteen of members of the royal family and the court of that time. Most of the royal pyramids of Dynasty V and Dynasty VI have been identified, and in the great cemeteries of Giza, Abu Sir, and Saqqarah a considerable number of tombs of the princes and nobles of the Old Kingdom have also been recovered. The tombs of many kings of the Middle and the New Kingdoms—among them the

tomb of King Tutankhamen, the only tomb of a king ever discovered intact—have yielded the remains of their contents to human knowledge. Most of the tombs of the sovereigns of Dynasties XXIII-XXVI remain unidentified, but the pyramids found and excavated in a distant sunburnt village in Ethiopia, at the foot of the Fourth Cataract, by the Harvard-Boston Expedition proved to be the pyramids of the kings of the Egyptian Dynasty XXV. Altogether that expedition has cleared the pyramids of sixty-eight kings and regnant queens of Ethiopia, which was, from the time of the Old Kingdom down to the Christian era, intimately connected with Egypt.

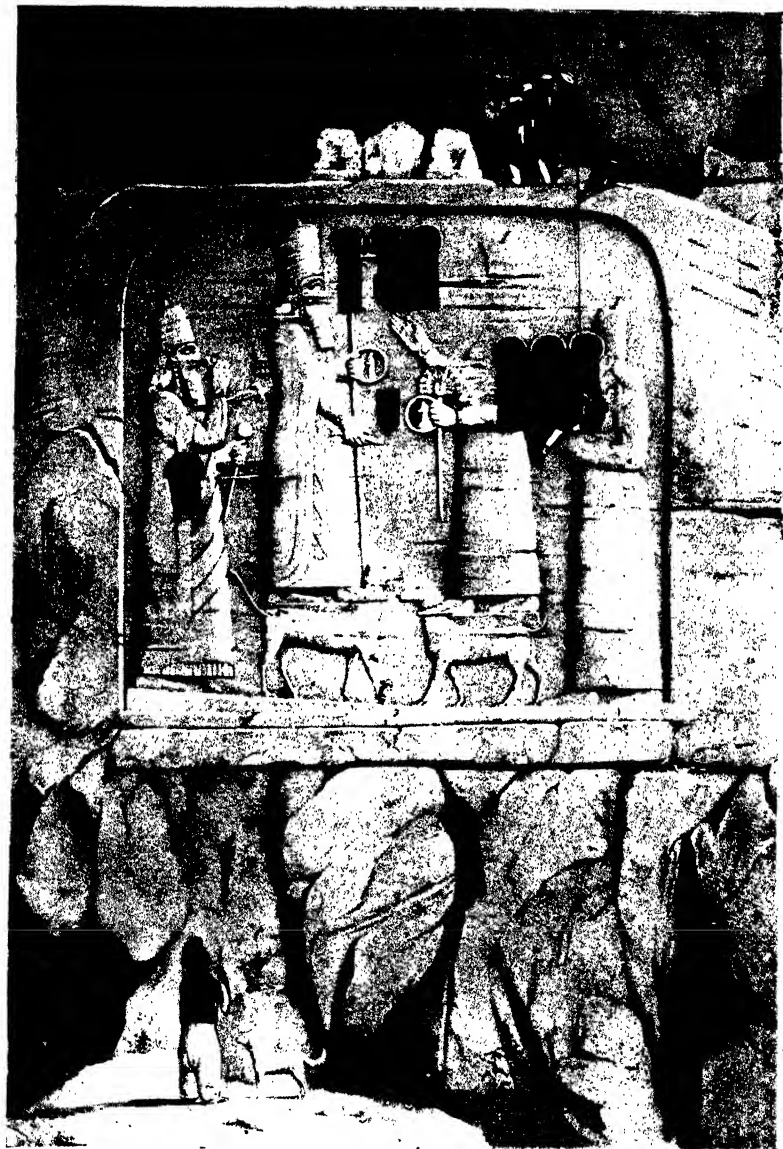
The graves of neolithic man of a period which may be vaguely but in good faith set as about 5000 B.C. plus or minus 500 years, have been uncovered in Egypt, as have other graves in a continuous series down to the time of Menes, the traditional first king of Dynasty I (3700 B.C. plus or minus 300 years). The outstanding event recorded by the archæological material of the predynastic period in Egypt is the introduction, about the middle of that period, of the practical use of metal, and the resulting development of the arts and crafts and of the political organization. The metal has been frequently analysed, and the analyses seem to show that down even to the Old Kingdom it was soft copper. But the tools of the Old Kingdom were certainly used to cut limestone, so that they could not have been tools of soft copper. It has, therefore, been concluded that some chemical or physical change has taken place during the thousands of years since then, and that the modern analyses do not accurately represent the ancient consistency of this metal. The hardening may have been due either to some alloy present in small quantities, or to an abnormal state of crystallization caused by hammering the metal when slowly cooling. Chemists and physicists admit that the alloy may have oxidized out in the course of thousands of years, or that an abnormal state of crystallization may have relaxed to the normal soft state. Whichever explanation is the true one, the ancient weapons, tools, and implements must have been of hardened copper.

Within a few hundred years following the introduction of the practical uses of copper Egypt was united as a political unit under Menes, and the whole of the surplus production of the country was placed practically at the disposition of one man. The present

writer attributes the great development of the arts and crafts, the invention of two of the earliest machines, and the creation of the mud-brick architecture with its wooden accessories to this unequal distribution of wealth which began under Menes and continued to the end of the pyramid age. The bow-drill was probably already in use; in the time of Menes the weighted stone-borer was invented for boring holes in stone and utilized for the manufacture of stone vessels; about the end of Dynasty II the potter's wheel came into use. In Dynasty III the mud-brick architecture was translated into limestone, and in Dynasties IV and V the use of granite and basalt as building stones was added to the use of limestone. During the same dynasties sculpture in the round and in relief was brought to its climax. The pyramids with their great temples and rich equipments were built, and the royal workshops became schools of architecture, sculpture, and of all the arts and crafts. From these schools the advances made by the creative masters imparted an influence distributed more or less imperfectly throughout the whole of the cultural area of Egypt.

Thus the archæologists and the philologists together have unravelled the main outlines of the growth of the two civilizations which arose in Mesopotamia and Egypt. About 2000 B.C. the Babylonians, and about 1600 B.C. the Egyptians, embarked on their careers of foreign conquest. In both cases the motive was the appropriation of the accumulated wealth and of the annual surplus of the other nations of Western Asia. The consequence was the spread of the elements of both cultures into the civilization of the peoples who lived about the eastern end of the Mediterranean and in the Greek islands. The punitive measures adopted by the Assyrians for subduing their rebellious subjects shifted a number of smaller populations from their native lands to other districts or to Babylonia. A knowledge of the cuneiform script and the Babylonian language was spread westward and reached even Egypt. Several of the minor nations adapted the script to the needs of their own languages. But it was apparently the Egyptian hieratic writing (an abridged form of hieroglyphic) which was utilized as the basis of the alphabetic writing of the western Semites, to be passed on to the Greeks and so to Europe.

From this brief exposition it will be realized that archæological research during the last seventy years has been the serious life-work



HENRY LAYARD BEING LOWERED TO EXAMINE AN ASSYRIAN ROCK SCULPTURE



of scholars drawn from many nations. Field-work, in particular, has been organized so that it involves steady and ceaseless labour in the systematic recording of the revelation and observation of historical evidence. Our gain is a knowledge of the development of the civilizations of these older nations, and an understanding of the conditions of the ancient world at the time when younger people began the careers which were to lead men further on the road towards our modern culture.

CHAPTER XIX

EXPLORATION AND ARCHÆOLOGY IN PALESTINE

BY PROF. WARREN JOSEPH MOULTON, PH.D., LL.D.

In Palestine itself archæological excavation has not yet advanced far enough to yield results comparable to those in Babylonia or Egypt. Laborious and painstaking work has been done in the very important task of identifying the places mentioned in the Bible and in clearing up Biblical geography.

UP to the opening of the nineteenth century little progress had been made in the scientific exploration of Palestine. From the days of the Emperor Constantine the Holy Land continued to be visited by many pious pilgrims, but their records hardly do more than perpetuate the growing traditions regarding the sacred sites in which they were interested.

The earliest work of any considerable importance is a fourth century alphabetical list of Biblical place-names, with suggestions as to their identification. This was compiled by Eusebius, Bishop of Cæsarea in Palestine, and is known as his Onomasticon. It was amplified later and translated into Latin by St. Jerome, who was himself thoroughly familiar with the country.

The records of pilgrimage and travel, both Christian and Mohammedan, written in the following centuries, have much of interest and value, but it is not until we come to U. J. Seetzen (1805-7) and J. L. Burckhardt (1809-12) that the new day begins to dawn. The morning star of this era was Edward Robinson, professor in Union Theological Seminary, New York City. He accomplished results in a journey of two and one-half months in 1838 that won for him, both in Europe and America, the distinction of being the first really scientific traveller in Palestine. His success was due to his thorough familiarity with his predecessors' achievements, to his high scholarly attainments and critical insight, and to the effective assistance of his companion, Dr. Eli Smith, an American

missionary. On his first journey as well as on his second (1852) Robinson concerned himself primarily with the physical and historical geography of the land, not neglecting the ancient remains visible above ground.

Other explorers with a like zeal for accurate research soon followed. Titus Tobler of Germany made repeated visits to Palestine (1845-1865) and carefully investigated the topography of Jerusalem and other portions of Judea. From the same period comes a masterly work in seven volumes by M. V. Guérin, setting forth the geographical, historical, and archæological results of successive journeys in Judea, Samaria and Galilee.

An event that led to most important results was the English survey of Jerusalem and its immediate vicinity in 1864-65. This was made by a party of Royal Engineers, under Captain (later Major-General Sir) C. W. Wilson, and the data were embodied in the first accurate plan of the city. It was while the interest aroused by this work was at its height that steps were taken in London to organize the Society known as the Palestine Exploration Fund, which for sixty years has been the one outstanding agency for "investigating the archæology, geography, geology and natural history of Palestine."

After a preliminary reconnaissance and some excavation at Jerusalem, the Society entered upon the survey of the entire district west of the Jordan. This was begun in 1871, and after serious interruptions, was completed seven years later. Two additional years were required to produce a large map, on the scale of one inch to a mile, covering the territory from Tyre and Banias in the north to the Egyptian desert in the south, and from the Jordan to the Mediterranean. The earlier sketch map of Van der Velde was thus superseded, and for the first time students of the Old and New Testaments had a reliable guide for their studies in Biblical geography. A wealth of information was published, including plans, sketches, descriptions of ruins, name-lists collected during the survey, an account of explorations at Jerusalem, and of the flora and fauna of Palestine.

Plans for a similar survey of Eastern Palestine were frustrated by the Turkish Government after five hundred square miles had been covered. Maps of most of the remaining territory have, however, been made subsequently by Dr. G. Schumacher,

who was connected with the survey of the Haifa-Damascus railway.

A geological survey of the basin south of the Dead Sea to the Gulf of Akaba was next undertaken by the Exploration Fund, and at the same time Captain (later Earl) Kitchener was sent to make a triangulation and survey of this same region, and to join up with the triangulation already completed in Palestine. In 1869-70 the society had surveyed a small portion of the Desert of the Exodus, including Mount Sinai, and had made a reconnaissance north-eastward as far as the valley of the Dead Sea. Finally, just before the Great War, the same society sent out yet another surveying party into this same area, and brought the work to a successful conclusion in May, 1914. An excellent map has now been published, and also a very valuable account of the ruined towns within the district. Thus the Palestine Exploration Fund has given us reliable maps of the whole of Palestine west and east of the Jordan, as well as of the Desert of the Wandering. The lustre of this extraordinary achievement has been dimmed in no way by what has since been done by individual investigators to supplement the work. We can never forget our indebtedness to the pioneers who through many years of persistent and laborious effort laid the enduring foundation for our geographical and topographical knowledge of Palestine.

In the field of archæology research began later and has progressed more slowly. During 1860-61 the celebrated French scholar Ernest Renan, acting as the archæological envoy of Napoleon III, excavated at various centres in Phœnicia, and in 1867-70 the Palestine Exploration Fund did some digging on the eastern hill of Jerusalem. However, the real beginning of Palestinian excavation may be said to date from 1890. In March of that year, the last-named society sent out an expedition under the well-known Egyptologist Flinders Petrie, which excavated at Tell el-Hesi, provisionally identified as the Biblical Lachish. It is a conspicuous ruined mound in south-western Palestine, about sixteen miles north-east of Gaza. Upon a natural hill, some sixty feet in height, another hill of equal altitude has little by little been built up through the centuries by the ruins of seven successive cities that have occupied the site. Since the time and means at his disposal did not permit the excavation of the whole area, Dr. F. J. Bliss, who succeeded

Petrie during the second and third seasons, decided to confine his attention to one-third of the mound. This section was cut down with the greatest care, layer by layer, to the level of the natural rock. In this way the remains of the several towns were brought to light, the oldest dating from the third millennium B.C. In the fragments of pottery that had been buried by the crumbling mud walls of the houses Petrie found a key to the history of the site, a key which continues to be used with the greatest success in all similar archæological investigations.

Among the more important discoveries was a small baked clay tablet with a cuneiform inscription, that is to be dated about 1450 B.C. It was similar to the famous Tell el-Amarna tablets which had been found shortly before in Egypt. Several of these bear messages sent to the King of Egypt by his viceroys in Palestine and Syria. Four other cuneiform tablets of like character were found later (1899) in the Austrian excavations at Taanach.

The work of Petrie and Bliss made it evident that the mounds of the ruined towns with which Palestine is dotted from north to south are treasure-houses of information regarding former days. But the trained excavator alone can recover and properly interpret these ancient records. For such a task time is needed, adequate means, and the friendly co-operation of the government. Happily, the exasperating official difficulties of former days no longer exist under the British mandate.

In the years 1899 and 1900, immediately following the work at Tell el-Hesi, partial excavations yielding important results were made at several points in the line of low hills running north and south between Judea and Philistia, known as the Shephelah. The places in question were Tell Zakariya, identified as the Biblical Azekah; Tell es-Safi, thought to be the Philistine Gath; Tell el-Judeideh, and Tell Sandahannah, the ancient Marissa, the supposedly Morsheth-Gath of Micah i. 14.

Then a much more extensive, and consequently more rewarding piece of work was done by the Palestine Exploration Fund at Tell el-Jazar, the Hebrew Gezer. This city was given by the Egyptian King to his daughter upon her marriage to Solomon (1 Kings ix. 16). It occupied a conspicuous position on a low mound three miles south-east of Ramleh, and commanded the approach to Jerusalem. The excavator, Dr. R. A. Stewart Macalister, traced its

history from the days of a primitive race of cave-dwellers of small stature (about 3000 B.C.) down to the crusading and Arab periods. The earliest known reference to the place is an inscription of Thothmes III (about B.C. 1500) on the Temple of Karnak in Egypt. Three letters among the Tell el-Amarna tablets written a few years later by Yapakhi, the ruler of Gezer, to his Egyptian sovereign, are our next record. Biblical history of the site begins with the allusions to it in Joshua xvi. 10 and Judges i. 29. Two fragmentary clay contract-tablets from the middle of the seventh century B.C. were recovered, and gave evidence of Assyrian domination in Gezer during the reign of Manasseh, King of Judah (685-641 B.C.). Embedded in a late stratum were the foundations of a strong castle, supposedly that of Simon the Maccabean, who in 159 B.C. recaptured the city from the Syrians.

Among the more important discoveries at Gezer were a spacious rock-cut passage, with eighty steps descending to a spring in a cave ninety-four feet below the surface rock, and a remarkable Semitic sanctuary or "high place" that appears to have been used for at least a thousand years down to 600 B.C. A row of ten unhewn monoliths, ranging from five and a half to ten and a half feet in height, eight of which were intact and still in position, stood in a line running north and south. Close at hand was a large block of stone with a rectangular hollow that suggested a laver for ablutions, and not far distant there were caves and a pit which evidently played their part in the sacred rites. The latter contained a confused heap of human bones mingled with those of animals, possibly the remains of sacrificial victims. Within the same sacred enclosure there were evidences of child sacrifice and of the demoralizing rites associated with "high places," which were vigorously denounced by the Hebrew prophets.

A high place with three pillars, enclosed by rough walls, had previously been found at Tell es-Safi. Another was uncovered at Taanach, as was also a curious terra-cotta incense-altar, adorned with animals' heads. This belonged to the same period but came from another part of the ruins. Since then several high places cut in the solid rock have been discovered on the heights about the Nabataean city of Petra, south of the Dead Sea.

Dr. Macalister in the course of his explorations came upon a cave which he conjectured might have been a sanctuary of the primitive

inhabitants. At another level he found what he thought to be the ruins of a Philistine temple. Subsequent excavations at Beth Shemesh, not far from Gezer, brought to light the remains of a heathen temple or high place in the central portion of the city, and the German excavators at Megiddo uncovered a section of what seemed to be a large sanctuary, as well as other smaller places of worship, which were still in use during the Hebrew period. They reported likewise that at another point there was a rock-cut altar communicating with a series of caves below. These discoveries and others of like nature have done much to acquaint us with the earlier religious history of Palestine, and with the degrading forms of worship that Israel found upon its entrance into the land.

Ancient Jericho was partially explored with interesting results (1907-9) by Professor Ernest Sellin under Austrian auspices. During the years 1908-10 rewarding excavations were carried on by Dr. David G. Lyon and Dr. George A. Reisner, for Harvard University, at Samaria. The outlines of the great temple to Augustus built by Herod over the ruins of earlier structures could still be seen, together with the magnificent stairway, over seventy feet in width, by which it was approached. The altar stood in the forecourt, and near by was the torso of a colossal statue bearing the insignia of an emperor, probably of Augustus. Further evidence of the extent and magnificence of Herod's reconstruction is given by a spacious forum surrounded by a colonnade, by a stately basilica, by a street along the top of the hill flanked on either side by columns, and by an imposing western gateway which rests on ancient foundations.

A discovery arousing the keenest interest was that of sixty-three potsherds bearing Hebrew inscriptions. These *ostraka* were found in the chambers of Ahab's palace; they are receipts, or records of business transactions in oil and wine. Not only do they acquaint us with the Hebrew writing of the ninth century B.C., but they preserve many personal and place-names. In view of the importance of the results of the excavations at Samaria thus far, it is to be hoped that they may be continued at an early date.

That Tel el-Ful, a commanding hill three miles north of Jerusalem, is the Gibeah of Saul has been established recently by a minor excavation carried on by Dr. W. F. Albright for the American

Schools of Oriental Research. A succession of powerful fortifications occupied this vantage point from the thirteenth century B.C. down to the Maccabean period.

One of the most thorough pieces of archæological research within the limits of Palestine has been going on for several seasons at the site of the Old Testament Bethshean, the later Scythopolis, under the direction of Dr. Clarence S. Fisher, representing the University of Pennsylvania Museum. From the earliest days this was a very important city, dominating as it did the great military and commercial highway between Egypt and Mesopotamia. The work has already advanced sufficiently to bring to light the city of the days of Saul and David. The underlying ruins from a still earlier period have yielded up two inscriptions on basalt giving important information as to Egyptian domination at the time of Seti (about 1320 B.C.) and his son Rameses II (about 1292-1225 B.C.). In the course of the inscription that the latter caused to be written, he says: "I have collected the Semites that they might build for me my city of Ramses." Thus convincing proof is obtained for the hypothesis previously held that he was the Pharaoh of the Oppression. It is estimated that ten or more years will be needed to remove the fifty feet of débris still covering the hill-top. Evidently this summit was originally occupied by settlers at a period too remote to be accurately determined at present. The successful completion of this comprehensive undertaking will mark a great advance in Palestinian archæology.

Following the Great War, the Palestine Exploration Fund made a beginning of excavating the vast remains of the Philistine city of Ascalon on the coast, but of late, assisted by the London *Daily Telegraph*, the society have transferred their operations to Jerusalem, where they have worked on two former occasions. During 1867-70 shafts were sunk on the eastern hill of the city to the west and south of the Temple area by Lieutenant Charles Warren of the Royal Engineers. It was found that at various points these massive enclosing walls descended from eight to one hundred and twenty-five feet below the present surface of the débris. The construction of the walls was explored further by underground galleries. The fallen arches of a bridge, once spanning the Tyropoeon valley and connecting the Temple enclosure with the western hill, were discovered at a great depth. At this time the course of the eastern



AN ANCIENT SARCOPIHAGUS FOUND NEAR CÆSARÆA.





A TABLET FROM HEROD'S TEMPLE, FORBIDDING STRANGERS TO ENTER THE SACRED ENCLOSURE.

city wall south of the Temple was also traced for some distance along the ridge above the Kedron valley.

Thirty years later three seasons were spent by Dr. Bliss in excavating the walls which formerly bounded Jerusalem on the south. Starting on the western hill, at a point in the ancient fortifications known as Maudsley's scarp, he followed their course at intervals down into the Tyropoeon valley and across the eastern hill to the Kedron valley, so gaining information regarding the earlier limits of the city and the walls and gates that were rebuilt by Nehemiah. He came upon a grand flight of steps on the west side of the pool of Siloam and, just to the north of it, discovered the foundations of an ancient church thought to have been erected by the Empress Eudocia in the fifth century A.D.

The present excavations are under the direction of Dr. Macalister and confined to the summit of the south-eastern hill, above the so-called Virgin's Spring, and it is understood that what is here brought to light is to be left exposed as a national monument. Thus future visitors will have an opportunity to see what is now definitely established to be the site of the ancient Jebusite stronghold taken by David and later known as the city of David. It is fortunate for the excavator that Jerusalem has moved northward and is still expanding in the same direction. Thus an almost uninhabited area of the greatest interest is left to the south, outside the present city wall.

In connexion with his other work at Jerusalem in 1867, Lieutenant Warren explored the Virgin's Spring at the base of the south-eastern hill above the Kedron valley. He found a shaft communicating with the spring and leading to passages above, which were evidently designed to give the inhabitants access to this living water in case of Jerusalem being besieged. An expedition headed by Captain Montague Parker in 1909-11 cleared out the tunnels in question, and the whole passage which belonged to the pre-Israelite period has now been drafted and measured by the Dominican scholar Father Vincent. New information was also gained regarding two subsequent systems of canals leading outward from the spring into the valley, and likewise as to a series of rock-cut chambers of very early date, in close proximity to the collecting-pool.

All these constructions antedated the famous winding tunnel

that was cut through the hill for a distance of seventeen hundred feet by King Hezekiah in the eighth century B.C. This was designed to bring the water to a place of safety in the Pool of Siloam within the city walls, and was no doubt one of the defensive measures alluded to in 2 Kings xx. 20, and 2 Chronicles xxxii. 30. Such elaborate efforts to preserve and guard the water of this spring, continued through the centuries, show how indispensable it has been to the life of the city.

Comparatively few inscriptions of an early date have come to light thus far in Palestine and the immediately adjacent territory. Of those now known, the first place may well be given to the "Moabite Stone." This was found by a German missionary, Rev. F. A. Klein, in 1868, in the ruins of ancient Diban, east of the Dead Sea. It is a block of black basalt, having an inscription of thirty-four lines commemorating the successful exploits of Mesha, King of Moab. It tells how he won back the cities taken from him when he was made a vassal of Israel by Omri in the ninth century B.C. (2 Kings iii. 4 ff.). Proof is thus given that the Moabites were closely related to Israel in speech and civilization.

In 1880 an inscription in ancient Hebrew characters, now in Constantinople, was accidentally discovered on the wall of Hezekiah's rock-hewn tunnel at Jerusalem, alluded to above. No names are mentioned, but there is a description of the successful meeting of two groups of workmen who had been chiselling their way toward each other along a circuitous course from opposite sides of the hill. The record is of importance historically and also as an early specimen of Hebrew writing. The knowledge that it gives in this last respect has now been supplemented by the inscribed potsherds from Samaria.

The fragment of a calendar of the agricultural seasons, written in pre-exilic Hebrew, was found at Gezer. Various inscribed small objects, including seals, jar-handles, and coins, have been published from time to time. A seal from Megiddo is of particular interest since it bears the name of "Shema the servant of Jeroboam." There are a few Hebrew inscriptions of some importance from later days, but thus far the harvest in the field of Semitic epigraphy has not been abundant.

A number of Phœnician inscriptions from the fifth to the second century B.C. rewarded the excavators at Sidon and other points in

Syria. Aramaic inscriptions were found by an expedition that was sent out to Zenjirli, in Northern Syria, by the Berlin Museum in 1888-89. Numerous Nabataean inscriptions, dating for the most part from the period just before and just after the Christian era, have contributed something to our knowledge of this later kingdom of Eastern Palestine that was a near neighbour to Judea. There has been a growing interest in the Nabataeans since Burckhardt's rediscovery in 1809 of their capital city Petra, with its sacred shrines and magnificent rock-cut tombs.

There are a good many Greek inscriptions from west and east of the Jordan, and the number is constantly increasing. The painted tombs of Beit Jibrin, discovered by Drs. Peters and Thiersch in 1902, have sepulchral inscriptions from the second century B.C., giving the names of those who had been members of the Sidonian colony at Marissa. The list has been supplemented since from neighbouring tombs which have been opened and rifled by the natives. The excavations of Bliss at this place yielded Greek inscriptions from about 200 B.C.

A tablet from Herod's Temple was found by Charles Clermont-Ganneau in 1871, doing duty as a tombstone in a Mohammedan cemetery in Jerusalem. It bears a warning in large letters that any Gentile caught passing the barrier about the inner courts of the sanctuary will be liable to condemnation to death. Fragments of a tablet relating to taxation have come to light at Beersheba.

The Greek inscriptions from the Christian period in Palestine have been largely supplemented by discoveries in other parts of Syria. The American Archæological Expedition to Central and Northern Syria (1899-1900) under the leadership of the late Dr. Howard Crosby Butler, and the succeeding expeditions sent to the same field by Princeton University, have greatly extended the earlier researches of Count Melchior de Vogüé and have gathered a vast store of Semitic, Greek and Latin inscription material. They have also done a monumental piece of work in the field of early Christian architecture.

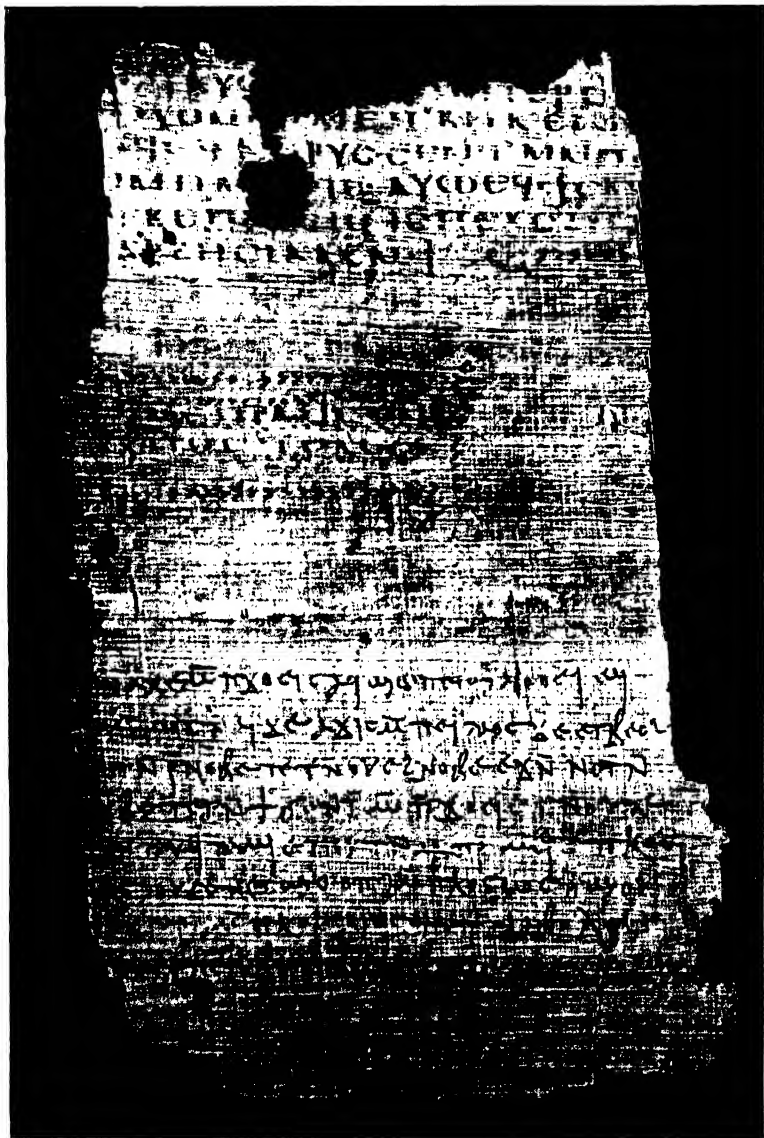
Thus far, except for Samaria, few sites that might be expected to yield valuable results for New Testament times have been explored. The ruins of several ancient Galilean synagogues have been investigated to some extent by the German Oriental Society. At Tell Hum, the probable site of Capernaum, they uncovered the

remains of a very beautiful fourth century synagogue, and below this were the foundations of a still older structure, which some would carry back to the date of the centurion of Luke vii. 5.

As Palestine is gradually recovering from the ravages of the Great War, a new epoch seems to be opening for archæological research. More and more the individual explorer is being replaced by scientific organizations. Since the Great War both the Dominican "Practical School of Biblical Studies" and the German Archæological Institute have resumed their work. Among those more recently established are a British School and the American Schools of Oriental Research, so called because an Institute has been opened in Bagdad as well as in Jerusalem. In the latter city the first unit of a commodious home is in process of construction. There is every reason to believe that advances, comparable to those achieved during the last hundred years regarding the geography and topography of the Holy Land, are now destined to be made in the further discoveries of archæologists.



THE MOABITE STONE.



THE OLDEST BIBLE IN THE WORLD, A COPTIC VERSION OF DEUTERONOMY, JONAH, AND THE ACTS

CHAPTER XX

THE CRITICISM OF THE OLD TESTAMENT

BY PROF. ARTHUR S. PEAKE, D.D.

"Prove all things; hold fast that which is good." These are not the words of a modern critical scientist, but were written by the great Apostle Paul. So to apply the principles of scientific literary and historical research to the Bible is but to follow his directions. A survey of the results of research makes it clear that Christianity has nothing to lose and everything to gain by fearlessness.

FEW phenomena are more patent in the present condition of religion than the radical change in the position accorded to Scripture. Once it was regarded as from beginning to end the direct and infallible utterance of the Holy Spirit, the final court of appeal in all matters of faith and practice. As the utterance of one and the same Divine Author it was throughout wholly self-consistent; no statement of fact, no presentation of doctrine could be inharmonious with any other. Its authority over-rode the results reached in all realms of research and speculation. In archæology and history, in ethics and metaphysics, in geology, physics and biology, one utterance of Him who created and sustained the universe and controlled the march of history, outweighed the scientist's cosmic theories attested by however an imposing mass of phenomena, the historian's reconstruction of the past, and the profoundest speculations of the philosopher. Now all is changed. The dominion of the Bible has shrunk; the alien realms which were claimed for it have regained their autonomy. In these kingdoms of observation, experiment, and research, of slow and profound meditation or swift and piercing intuition, the writ of Scripture no longer runs.

If the question is asked, How has this revolution come about? the answer often offered would be that it is all due to the baleful (or the beneficent) action of the Higher Criticism. What criticism

means and why it is styled "Higher" would be questions to which an answer might be hazarded, but the probabilities are considerable that the answer would be wrong. It is not true, however, that the collapse of the old theory of Scripture is due entirely to the corroding influence of criticism. It has been produced by a multiplicity of causes. The revolution in astronomy which we associate with the name of Copernicus, the geologist's scrutiny of the record in the rocks, the biologist's theory of slow and gradual development as opposed to sudden and special creation, the retreat of human origins into a more and more distant past enforced by archæological discovery, the findings of Comparative Religion, have all played their part. And when we come to those sciences which are occupied with the investigation of Scripture we must recognize that even here criticism has not been the only factor in the process. The inclusion of much which we now realize to be morally objectionable has made it difficult to maintain the Divine authorship at many points; and the presence of different and indeed divergent types of theology has undermined the old assumption that one self-consistent scheme of doctrine was implicitly pre-supposed or explicitly declared throughout. Yet criticism has undeniably played a large part in creating the new situation.

We may for our purpose distinguish three branches of criticism. Literary criticism in the sense of æsthetic appreciation does not concern us, though the term is sometimes used for that department of study which is more generally known as Higher Criticism. As the use of the adjective itself suggests, there is in this term an implied contrast with another type of criticism, namely the Lower Criticism. Those who have been long familiar with the phrase "Higher Criticism," when they learn of the existence of the Lower Criticism are apt to imagine that the latter is a name for conservative views on Biblical criticism while the former is the designation of advanced views. This is an elementary blunder. The terms indicate a difference in the questions investigated, not in the results reached. Lower Criticism is more commonly called Textual Criticism because its sphere of operation is the restoration of the text to a form as nearly as possible identical with that in which it left the author's hand. Higher Criticism is occupied with problems of date and authorship,

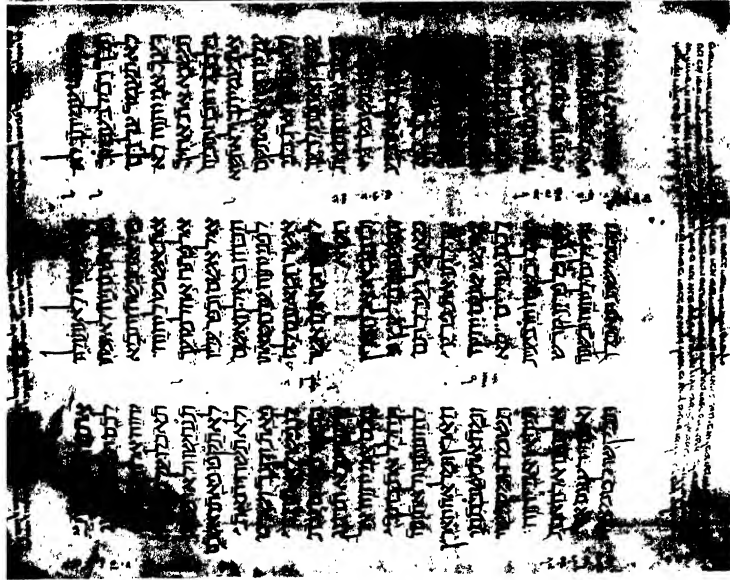
with the analysis of composite works into the sources from which they have been compiled, with the delimitation of these sources and the determination of their date. There is a third type, however, with which we are concerned, though within the limits of our space it can be touched upon only incidentally in this chapter. This is Historical Criticism. It deals with two problems: first, the estimation of the standard of accuracy exhibited by the documents we are investigating or the sources from which they have been compiled; and secondly, the trustworthiness of the narratives which they relate.

On the Lower or Textual criticism of the Old Testament little need be said. The original Hebrew text consisted of consonants only, the vowel points having been added many centuries later. As the words were also written without separation from each other and as there was great similarity between some of the letters, mistakes easily occurred, and these might be erroneously corrected by the next copyist. Not infrequently the eye of a scribe might pass when copying from the first occurrence of a particular group of letters to its second occurrence, so that the intervening words were omitted, or from its second occurrence to the first, the intervening words being written twice over. In the former case the words omitted might be irretrievably lost and the attempt to make good the omission might constitute a fresh source of corruption. That the Hebrew text has not been preserved intact is clear from the fact that there are passages which cannot be translated without violence as they stand; there are passages which occur twice over with differences which, in some cases, cannot be reasonably explained except as due to textual corruption; moreover, there are very many cases where the ancient translations preserve a different and in all probability a superior text. By the help of these versions and especially the Greek translation known as the Septuagint, it is possible in many instances to suggest a highly probable restoration of the original. But in cases where the versions support the Hebrew, but the text seems not to be original, it can be restored, if at all, only by conjecture. Conjectural emendations may in some instances be morally certain; but short of that they represent all degrees of probability or improbability. Even the use of the versions is restricted by the fact that the text of these, notably of the Septuagint, is still far from established.

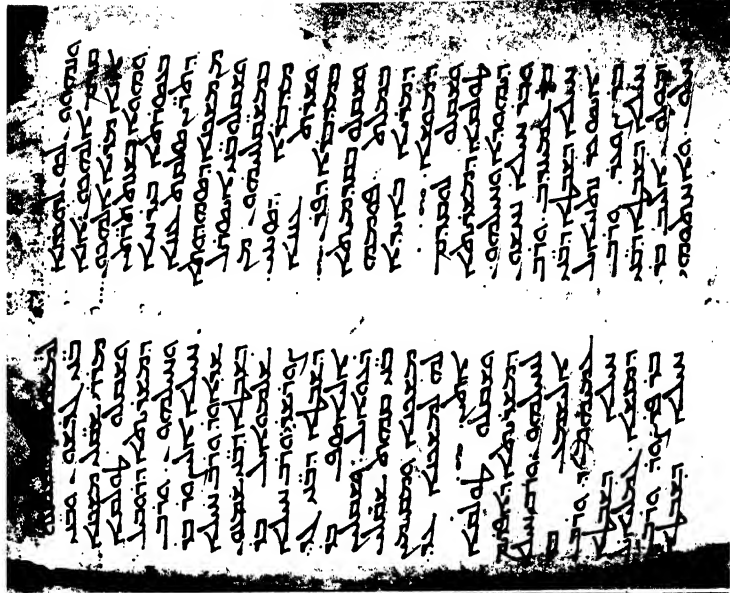
The Higher Criticism presents much more momentous problems. The primary question touches the analysis of the Pentateuch and the dating of the documents when they have been disentangled. A number of phenomena were observed by earlier scholars which pointed to post-Mosaic elements in the Pentateuch, but these could be explained as notes inserted by Ezra or some other inspired annotator in a Mosaic work. But it was also possible to argue that if several features in the Pentateuch were non-Mosaic and post-Mosaic, the same verdict must be passed on the Pentateuch as a whole.

A decisive advance was made by Astruc, a French Roman Catholic physician, in 1753. He called attention to a distinction in the use of the Divine names in Genesis. These are the names "Yahweh" (commonly known in the incorrect form "Jehovah") and "Elohim," the former represented in the English version by "LORD" and the latter by "God." The title of his book was "Conjectures on the Original Memoirs which it Appears that Moses Employed to Compose the Book of Genesis." Thirty years later in his "Introduction to the Old Testament" (1783) J. G. Eichhorn independently came to similar conclusions. Both scholars attributed the Pentateuch to Moses. From this position Geddes broke away, though he rejected the clue to analysis which his predecessors had found in the use of the Divine names. He admitted a considerable Mosaic element in the Pentateuch, but dated the work itself not earlier than the reign of David or later than Hezekiah. Ilgen in 1798 detected the work of two Elohist writers, though for long no use was made of his observation.

One of the greatest names in the history of Old Testament criticism is that of De Wette. His "Contributions to Old Testament Introduction" (1806-7) made an epoch in the subject. Of his results perhaps the most important was the identification of Josiah's Law Book with Deuteronomy. His chief contribution to method was the comparison he instituted between the history of religious institutions as reflected in the earlier historical books (Judges, Samuel and Kings) and the laws on these subjects which are preserved in the Pentateuch. He drew a sharp distinction between these earlier narratives and the late Books of Chronicles in the matter of historical trustworthiness. The next important step in the



THE PENTATEUCH IN HEBREW, WITH THE GREATER MASSORAH IN THE UPPER AND LOWER MARGINS AND THE LESSER MASSORAH AT THE SIDES, DATE NINTH CENTURY.



SYRIAC VERSION OF THE PENTATEUCH, WRITTEN A.D. 464. THIS IS THE EARLIEST MANUSCRIPT OF THE BIBLE IN ANY LANGUAGE OF WHICH THE EXACT DATE IS KNOWN

discrimination of sources was taken by Hupfeld, who in 1853 demonstrated the truth of Ilgen's observation that two writers used Elohim. As it was now recognized that the documents found in Genesis were present also in the later books, the general lines of Pentateuchal analysis were at length complete. Four main sources had been distinguished, one Yahwistic, two Elohist, and Deuteronomy. The symbols attached to these documents by more recent scholars are respectively J, E, P and D.

The problem of date and order had not, of course, been neglected. De Wette's identification of Josiah's Law Book with Deuteronomy had been generally accepted by critics; but Deuteronomy had been commonly regarded as the latest element in the Pentateuch. The Elohist stratum was considered to be the oldest, and when the decisive step had been taken of discriminating E from P it was almost universally held that P was the earliest of the four documents. It was in fact not infrequently spoken of as the older Elohist or as the "Grundschrift" or basal document. It supplied in fact the framework in which the other documents were inserted, and the assumption seemed natural that it should have been composed first and that the other documents should have been compiled later and inserted in it. But obviously the process might have been the reverse; and when once the assumption had been challenged definite arguments were needed to support it. The Priestly Document is marked by its wealth of statistical detail and similar features which impressed the earlier critics with the feeling that the author must stand nearer to the events than the compilers of the other documents, which exhibited no such abundance of apparently accurate detail. This inference was unconsciously discredited by Colenso, whose proofs of the untrustworthiness of the Pentateuch, while made without reference to the documentary analysis, did, as a matter of fact, rest almost entirely on evidence drawn from the Priestly sections. Nöldeke demonstrated this more systematically and with special reference to the documentary analysis. Nevertheless, neither he nor Colenso drew the conclusion that the document which was in this respect the most vulnerable was not likely to be the earliest.

As early as 1833 Reuss had anticipated in a measure the view of later critics that the Priestly section was the final element in the Law, and in 1835 a very important work on these lines was published by Vatke. But it was not till near the close of 1865 that Graf, a

pupil of Reuss, published his proof that the legal portions of the Priestly Document were later than Deuteronomy. Unhappily the spell of conventional opinions still exercised such an influence over him that he regarded the narrative sections of P as constituting the most ancient part of the Pentateuch. His theory accordingly made no converts. Riehm argued against such a division of the document and pressed the inference that since the narrative was confessedly early and the laws could not be detached from it, the antiquity of the whole document, narrative and legislation, must be conceded. But Kuenen, the great Dutch critic, who had already been moving to some extent in the same direction, drew another inference. Since Graf had demonstrated that the laws were late and the narratives could not be separated from them, the document as a whole must be placed last in the series of documents from which the Pentateuch has been compiled. Graf accepted this vital correction before he died and "the Grafian theory," as it was called, was thus before the world in its final form. Kuenen wrote his great "Religion of Israel" from this standpoint and his influence did much to commend it outside Germany. Wellhausen brought most of the leading German critics to accept it by the publication of his "History of Israel, Volume I" (1878), which has been known in its later editions as "Prolegomena to the History of Israel." For more than forty years the theory has enjoyed very general, if not universal, acceptance among critics.

The grounds on which this revolutionary departure from traditional views has been made must now be briefly indicated. There is no early tradition assigning the Pentateuch to Moses. The numerous marks of non-Mosaic and post-Mosaic origin accordingly point here, as similar marks would point in any other literature, to a different authorship and a much later date. When the work is more closely examined it is found to contain double accounts of the same event, numerous inconsistencies, striking variations in vocabulary, in style and in standpoint. Comparison of the chronological data, for example, speedily shows that the narrative presents chronological impossibilities. Examination of the laws reveals discrepancies which cannot be reasonably attributed to a single legislator. And what is specially significant is that the differences in vocabulary, in style, in statement and in point of view are found to appear and disappear together. This can be reasonably explained only on the hypothesis

that different personalities are responsible for the differences which have thus been brought to light. By sorting out the related passages the critic is enabled to reconstruct the sources, at least to a considerable extent. The Priestly Document is characterized by such strongly marked and indeed peculiar features that its reconstruction is simple compared with the separation of J from E. Fortunately, however, the latter task is much less important than the former.

In determining the problems of order and date various criteria are employed. The documents may be compared with each other so as to determine which represent the more advanced and which the less advanced stage. They may also be compared with the historical books and with the prophets to discover the stage of the development to which they seem to belong. The most important criterion is the history of religious institutions. The Priestly Code, for example, makes a sharp distinction between the descendants of Aaron and the rest of the tribe of Levi. The former alone are ranked as priests with the right to offer sacrifice; the Levites may not aspire to the priesthood, but they have been honoured by Yahweh with the privilege of performing the more menial service of the sanctuary. But Ezekiel knows nothing of the exclusion of the Levites from the priesthood by Moses. He assumes that they hold the position of priests, but legislates for their deposition on the ground of their misconduct in the pre-exilic period. The situation presupposed by Ezekiel could not have arisen, nor would his remedy for it have been necessary, if he had known that from the first the Levites were prohibited from acting as priests. We may therefore take as a working hypothesis that P is later than Ezekiel. Moreover it is later than Deuteronomy to which also this crucial distinction is unknown. But the origin of Ezekiel's regulation is probably to be found in Deuteronomy. One of the main objects of this work was to safeguard the purity of worship by the abolition of the high places, or local sanctuaries, and the concentration of the worship at a monopolist sanctuary. The legislation provided that the Levites might come from the provinces to this central sanctuary and be admitted to its priesthood. When the Reformation of Josiah was effected, this provision could not be carried into effect, presumably through the opposition of the priests at Jerusalem whose monopoly it infringed. Ezekiel accordingly deals with the difficulty thus

created in a new way. He deposes them from the priesthood but places them on the staff of the Temple with an inferior status. We thus secure the following sequence—Deuteronomy, Ezekiel, the Priestly Code.

The date of Ezekiel is known, and if the Deuteronomic Code was the Law Book of Josiah's Reformation we have a fixed date below which the main body of it cannot be brought. The Priestly Code is later than Ezekiel, but, as it seems to have been accepted as binding law in the time of Ezra, its composition cannot be later than the fifth century B.C. This sequence is, of course, so far provisional; but a whole series of arguments tends to confirm it. Deuteronomy initiates a development which is completed in the Priestly Code, and finds in Ezekiel its middle term. On the other hand, J and E represent an earlier stage of development than Deuteronomy. The date of Deuteronomy is itself not fixed. It is generally believed not to be earlier than the reign of Hezekiah, and to embody in legislation ideals derived from the eighth century prophets. J is usually thought to be older than E. These documents may perhaps belong to the ninth and eighth centuries respectively, or may possibly be somewhat older.

In recent years what seemed to be the settled results of Pentateuch criticism have been challenged not simply by traditionalists, who have protested all along, but by critics. Some have discredited the accepted documentary analysis, though recognizing that the Pentateuch is not a unity nor the work of Moses. The criterion of the distinction between the Divine names is said, as by incautious traditionalists also, to be discredited by variants in the Septuagint which show that the textual basis of the documentary analysis is insecure. This, however, cannot be admitted. The Hebrew text has been in this respect triumphantly vindicated; moreover, the criteria on which critics rely are not limited to the use of the Divine names, but are much more numerous; and where the distinction of the Divine names does not obtain, analysis can be carried through with practically the same confidence. The attempt has also been made to push back the date of the Deuteronomic Code to a much earlier stage of the history and to disconnect it from the project of restricting the cultus to a single sanctuary. This is still under discussion, but it does not seem likely that so drastic a rectification of the critical view will be substantiated. On the other hand, more

extreme scholars are bringing the date of Deuteronomy down to a considerably later period than the reign of Josiah. In the case of Hölscher, whose proposals are the most radical, we have to register also the attempt to show that the greater part of Ezekiel is not the work of that prophet. The really significant feature of his reconstruction is that he still retains the Grafian sequence. Deuteronomy and Ezekiel and the Priestly Code are all assigned to later dates, but they stand in that order. It is very difficult to believe that Hölscher can be right about Ezekiel; and if the main body of that book is attributed to the prophet himself, then the date of the Deuteronomic Law can hardly be later than the time of Josiah's Reformation.

It is generally recognized that the documents which have been discovered in the Pentateuch run on through the Book of Joshua. Hence in this connexion critics often speak of the "Hexateuch" instead of the "Pentateuch," to indicate that the composite work with which critical analysis is concerned consists of six books rather than five. But it is thought by several scholars that the two oldest documents, J and E, are also to be traced in Judges, Samuel and Kings.

Another point, which should be briefly mentioned, is that a good deal of work has been done in tracing different literary strata within the main sources, in particular in J. One scholar, Otto Eissfeldt, has carried this to the point of arguing that instead of admitting an earlier and a later stratum in J, we should recognize another independent document, to which he gives the symbol L or lay document, so called because it stands at the opposite extreme to that occupied by the Priestly document. This theory involves not an abandonment, but an extension of the generally accepted critical position.

It is recognized on all hands that the historical books which follow the Hexateuch contain much old and valuable material drawn from ancient sources; but the framework in which this is placed and the editorial processes to which it has been submitted betray the religious outlook of a later age. This has affected the narratives themselves less than might have been feared, but it has frequently placed them in an artificial light owing to the editor's desire to point an ethical and religious moral. The most striking example of this is the Book of Chronicles in which the theological theories of the writer have led to a fairly systematic revision of the older stories preserved in Samuel and Kings.

III

Turning to the prophetic literature we are confronted with problems of great difficulty and complexity. It was recognized quite early in the history of modern criticism that the Book of Isaiah was a composite work. Chapters xl-lxvi were seen to presuppose the destruction of Jerusalem and the Exile and therefore to be later than the time of Isaiah. There were also kindred sections in the former part of the book on which a similar judgment was pronounced. But as more intensive study was devoted to the book and the criticism of other sections of the Old Testament developed, it was realized that a far more radical handling of the problems was required. Much in the former part of it which the earlier criticism had left with Isaiah was seen to be later, while much, if not the whole, of lvi-lxvi had to be credited to a time subsequent to that of the great unknown prophet of the Exile to whom we owe xl-lv.

So far as dates were concerned it was commonly thought that there was no need to assign anything in the book to a later period than the fourth century. Bernhard Duhm, followed and indeed surpassed by Karl Marti, assigned much in the former part of the book to the Maccabean period, a treatment which he subsequently extended to the Book of Jeremiah and in an exaggerated form to the Psalms. It is highly improbable that such drastic criticism will maintain itself and it meets with little favour from more recent scholars. It is improbable, indeed, that any part of the prophetic literature is later than the third century B.C. Duhm, who is one of the most penetrating and sympathetic interpreters of Jeremiah, has reduced the genuine work of the prophet to an incredibly small compass, but Hölscher has carried his criticism to a still greater extreme. To his criticism of Ezekiel reference has already been made. Although the view that the book is throughout authentic may be too optimistic, it is probably in the main the work of Jeremiah's junior contemporary, Ezekiel, whose name it bears.

Space will not permit a detailed reference to the Twelve Prophets; but some general remarks on the prophetic literature as a whole may be appropriately made at this point. It is not antecedently unlikely that earlier books, when taken at a later period into a sacred collection, might be adjusted to the new conditions in which the collection was made. And in the judgment of most scholars the needs of the post-exilic community have led to revision and

addition of this kind. In judging the extent to which this has happened we may take as a general principle that prophecy down to the destruction of Jerusalem was in the main prophecy of calamity (Jer. xxviii. 8, 9); while prophecy from that time on was in the main prophecy of restoration. Yet it would be pushing this principle to an illegitimate extreme if all optimistic predictions in pre-exilic prophecy were treated as later insertions. Some scholars argue that from a very early period a scheme of the future was in vogue, perhaps borrowed from abroad, which depicted a great catastrophe followed by a period of blessedness. But grave difficulties attach to this whole theory, otherwise the authenticity of much which has been questioned in the early prophets might be more successfully vindicated. A developed eschatology instead of being characteristic of the early period seems to have been a later growth, as indeed the tendency of prophecy to give place to apocalyptic suggests. Rudiments of apocalyptic are to be found in the later prophets; but it is not till the Maccabean period that we have an apocalypse, in the full sense of the term, in the Book of Daniel which, in the Hebrew Canon, is not placed in the section devoted to the prophets.

The tendency of criticism has been to relegate the whole corpus of poetical literature to the post-exilic period. It is probable that Job and the Song of Songs are later than the return from Exile; it is undeniable that much in the Psalter and probable that not a little in the Book of Proverbs should be assigned to the same period. But it is not unlikely that a certain amount of pre-exilic material has been incorporated in both of these books. There are presumably some Psalms which are as late as the Maccabean period. Ecclesiastes is probably a little earlier.

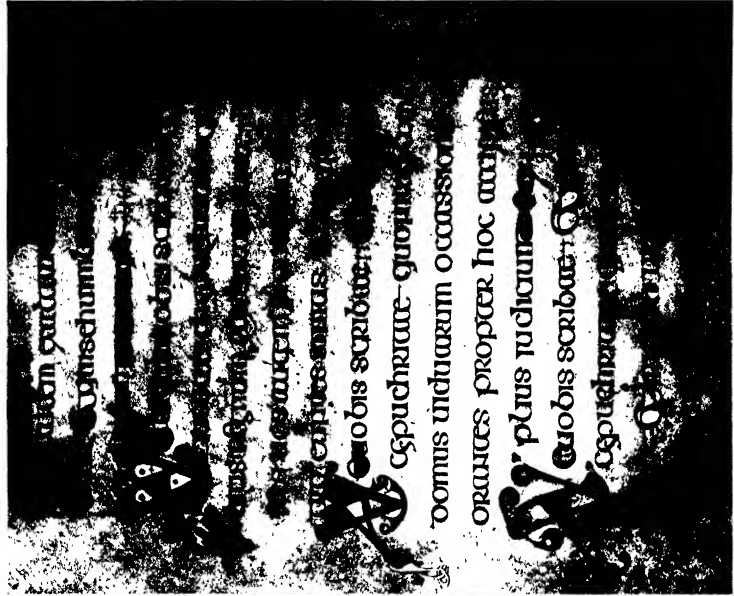
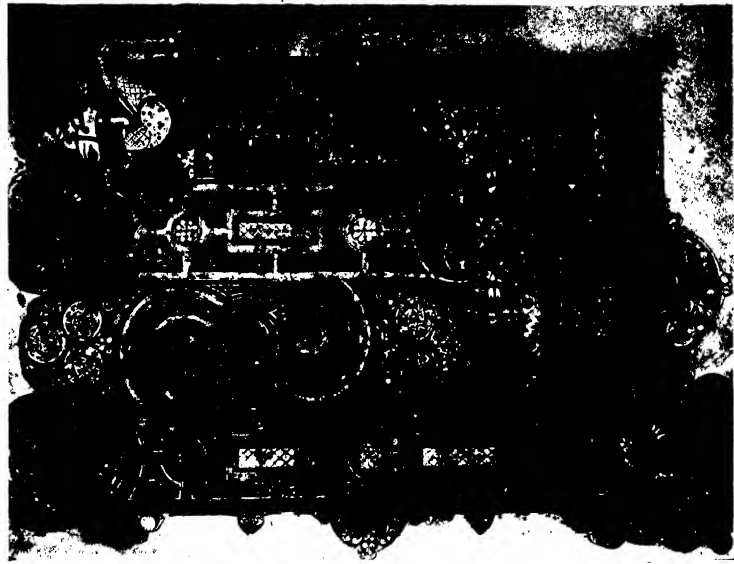
IV

It will be clear from what has already been said that the recognition of discrepancies which Higher Criticism has brought to light makes any appeal to the inerrancy of Scripture impossible. We cannot accordingly admit that Historical Criticism is ruled out by the absence of a legitimate field for its exercise. So far as the valuation of the documents is concerned, we naturally attach more weight to early and especially contemporary sources than to those which are remote from the events which they record. But it is now generally recognized that legend is a plant of rather rapid growth

and that even contemporary testimony is not immune from its infection. Another distorting influence is to be found in the theological preconceptions with which historians approach their subject. Thus the systematic revision of the older history by the Chronicler, to which attention has already been called, was partly due to his theory that the completed Law dated back to the origins of Hebrew history and had been, though frequently flouted, of Divine authority all along; partly to a very rigid theory of exact retribution, partly to a fondness for exaggerated numbers. Earlier historians similarly judged nation and monarch by the standard of the Deuteronomic Law.

For these and similar anachronisms the modern historian must make allowance. He will also be deeply impressed by the disproportion of the narrative, its fullness here, its meagreness there, in our judgment now redundant and now sadly defective in its information even on vital matters. The reign of Omri, for example, and of Jeroboam II were momentous for Israel's history, but they are dismissed with very brief notice. Happily at these and other points the prophets supplement the historians with valuable additions. Many a problem, keenly debated, but at present insoluble, would never have arisen had even the slightest care been taken to remove ambiguity. What was the date of Abraham? Who was the Pharaoh of the Oppression, and who was the Pharaoh of the Exodus? What was the date of Moses and of the Settlement in Canaan? These are but samples of important questions which the Old Testament data do not permit us to determine with any certainty. The main things which it is important for us to know are not indeed left in uncertainty, but the demands of a modern scientific historian are continually left ungratified.

We may bring this brief survey to a close with some general observations. The most notable feature of recent Old Testament study is the great enlargement of our horizons through the vastly fuller knowledge of the peoples in and especially around Palestine. The great empires of Babylonia, Egypt, Assyria and Persia are now far more fully known. Hittites, Phœnicians and Philistines, the Aramaeans and the earlier inhabitants of Canaan as well as Israel's kinsfolk, Edom, Moab, Ammon, have gained some illumination from the researches of explorers and archæologists. Anthropology and investigation into the history of religion have also made an



THE BOOK OF KELLS, THE FINEST EXTANT ILLUMINATED MS. OF THE GOSPELS. IT DATES FROM THE EIGHTH CENTURY.

important contribution. The problems of criticism have to be reviewed in the light of our new knowledge. At present it would seem, in spite of assertions to the contrary, that no fundamental revision of generally accepted critical conclusions is indicated by our new knowledge as likely to be needed. A critical theory is not something spun out of insubstantial fancies; it is the attempt to discover and explain the phenomena which a document exhibits as it is revealed to keen but comprehensive survey, or detected by microscopic scrutiny. And whatever external discoveries are made, it must never be forgotten that the phenomena which the Old Testament documents present still remain and still demand their explanation. New truth must receive its due—no less, but also no more. It may dip the balance of evidence sometimes in favour of tradition, but sometimes against it. It may settle some old problems, it is almost certain to raise new ones. Whether the believing Christian is friendly to criticism or not, it is bound to go on. From his point of view it is surely better that the task should not be abandoned to unbelievers. In itself criticism is dispassionate and impartial; it is solely concerned with ascertaining the truth, whether it tell in favour of or against cherished beliefs. It must work by its own methods, unfettered by fear of results, and without being deflected from the straight path by the desire to arrive at a longed-for goal.

And Biblical criticism is not only legitimate, it is essential. For the distinctive feature which we find in Scripture is that revelation has come through life, the life of the nation which we call "history," the life of the individual which we call "experience." And since this is so, we must know the history that we may disengage the revelation which has been communicated through it. But the history is enshrined for us in documents, and these must be placed in their right order, analysed into their component parts, and their historical value estimated if we are to relate the history aright. But this task of analysis, arrangement and valuation criticism alone is competent to perform. And the momentous fact that God has chosen history as His method of revelation does not merely warrant the use of criticism by the student, it imposes it upon him as an obligation which he is not at liberty to evade.

CHAPTER XXI

THE GREEK OF THE NEW TESTAMENT

BY PROF. E. J. GOODSPEED, PH.D.

Before the invention of printing, when it was necessary to copy all books by hand, errors of transcription were inevitable. The task of the science of textual criticism is to correct such errors by minute examination of all available evidence. In the case of the textual criticism of the New Testament, results have been achieved that are nothing short of brilliant.

IN 1786 the study of Sanskrit convinced Sir William Jones that this language, which Europeans had not previously known, had a common origin with Greek and Latin and probably also with Gothic and Celtic. This observation marks the beginning of comparative philology. The work of Jones in introducing Sanskrit to European scholars opened the way for the discoveries of Francis Bopp, whose writings, beginning to appear in 1816, laid the foundations of the new science, and made him the father of Comparative Philology. His "Comparative Grammar," in which he developed the relationships of Sanskrit, Greek, Latin, Gothic, German and their cognates, was completed in 1852 and appeared in an English translation. He was followed by Jacob Grimm, whose epoch-making "German Grammar," the first part of which appeared in 1819, showed what the new science of historical grammar might achieve. These investigations and those of Max Müller, George Curtius, William Dwight Whitney and others, put the whole study of language on a new basis and set that of Greek in particular in a new perspective. The further researches of Berthold Delbrück and E. Windisch developed the study of genetic syntax, so that we no longer study the Greek of any single period in isolation from that which went before and after, but find the key to the grammatical usages of each age in those of the periods that preceded it.

By these tremendous developments in philology New Testament grammar and lexicography have been greatly advanced. While the

earlier New Testament grammarians were still of the descriptive school, the modern grammars like those of Friedrich Blass and J. H. Moulton exhibit the historical method which has been so fruitful in other linguistic fields. The language of the New Testament is now studied in the light of the earlier Greek dialects, Ionic, Attic and Common, and in the light of later ("Modern") Greek as well; and the whole is illumined by our knowledge of its wider relationships to the other languages of the Indo-European family.

If New Testament grammar has profited greatly by philological advance, New Testament lexicography has been no less fortunate. The new philology meant quite as much to the dictionary as to the grammar. But the past century has also witnessed the decipherment and collection on a large scale of the Greek inscriptions, which have given the lexicographer invaluable contemporary materials for checking and revising studies of ancient literature. Still more recently, in fact in the past generation, the discovery of the Greek papyri has further enriched New Testament lexicography in a quite unlooked-for way. A great number of new lexicons of the Greek Testament has naturally resulted. Within the past seventeen years no fewer than six new dictionaries of New Testament Greek have appeared, from the hands of French, German, British and American scholars. With such aids in grammar and lexicon, and the admirable concordance of the Greek Old Testament as well as of the New, it may safely be said that never have students been so favourably equipped for the study of the Greek New Testament as they are to-day.

In the presence of such progress as this it is hard to realize that in the time of Wyclif no one in England knew Greek, and that at the end of the fifteenth century it was just beginning to be taught and studied there, with the most meagre equipment in the way of grammar and lexicon. This new interest in Greek busied itself at first with classical literature only; the New Testament had so long been represented by the Latin Vulgate that men had almost forgotten that it was only a translation of the Greek original. It was the great Erasmus who recalled attention to the Greek New Testament. Coming under the influence of John Colet at Oxford, Erasmus resolved to devote his talents to the Bible, and very soon

perceived that to do this effectively he must learn Greek. As Oxford in 1500 offered no facilities for that study, Erasmus took it up on the Continent, first at Paris and then at Orleans. He set himself to retranslate the Greek New Testament into Latin, and produced a new version of it which was destined to have a strong influence upon all the early printings of the English New Testament.

Even Erasmus does not seem to have thought of publishing the Greek New Testament until 1514, and in 1515 John Froben, a printer of Basle, asked to be allowed to publish his edition. Froben had heard of the Complutensian Polyglot Bible then being produced in Spain, of which the Greek New Testament formed a part, and he was anxious to forestall that part of the work. Erasmus returned to Basle and with extraordinary celerity produced the first published Greek Testament, accompanying it with his own new Latin rendering of it. While Erasmus had previously in his study of the Greek Testament assembled some readings from various manuscripts, most of those on which he actually based his edition he found at Basle. They were five in number: two of the Gospels, two of Acts and the Epistles, and one, somewhat defective, of the Revelation. The last was lent to him by John Reuchlin. Erasmus in his haste did not stop to copy these manuscripts or to construct a text. He simply sent a fifteenth century Gospels manuscript and a thirteenth or fourteenth century manuscript of Acts and the Epistles to the printer, and let him set up the Greek type directly from the manuscripts. Then Erasmus put into the proofs such readings from his other manuscripts as he thought preferable. But it was these two late manuscripts that chiefly coloured Erasmus's text of 1516.

While Erasmus made many corrections in his later editions of 1519 and 1522, his actual text was little bettered, and it remained very much that of his two leading manuscripts. It exercised a great influence on the first vernacular translations, for Luther used the edition of 1515 in making his German translation, and Tyndale based his New Testament of 1525 upon Erasmus's third edition of 1522. Erasmus himself strongly favoured the making of these translations. He said in his preface that he hoped the New Testament would be translated into all modern languages so that it might be read by all sorts and conditions of people, women as well as men.



~ BIBLIA ~
The Byble: that

is the holy Scripture of the
 Olde and New Testament,
 faithfully translated in
 to Englyshe.

M. D. XXXV.

S. Paul. II. Cor. III.
 Praye for vs, that the worde of God
 maye haue fre passage & be glorified.

S. Paul. Coloss. III.
 Let the worde of Christ dwell in you
 plenteously in all wysdome, &c.

Isaie. I.
 Let not the Boke of this lawe departe
 out of thy mouth, but exercepte thy selfe
 therin daye and nyghte, & thou mayest
 kepe and do euery thyng accordeinge
 to it that is wyrtten therin.



These are the lawes, that
 thou shalt lay before them.

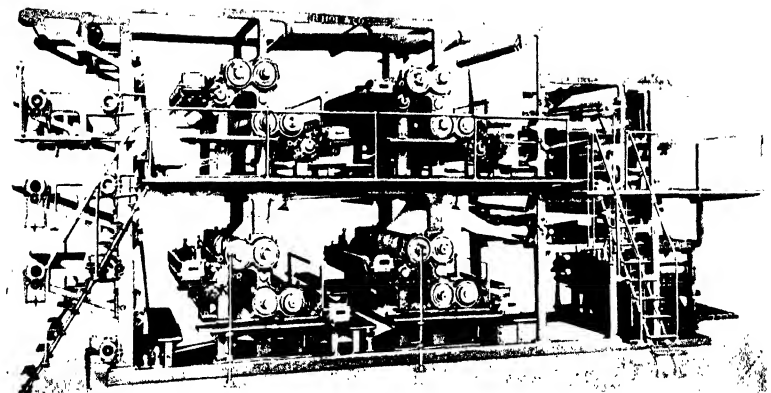


So youe were in to all the
 worlde, & preache the Gospel.





CAXTON'S PRINTING PRESS.



A MODERN NEWSPAPER ROTARY PRESS.

With Tyndale began the development of the English New Testament, which after the New Testament of Miles Coverdale, John Rogers, Richard Taverner, the Great Bible, the Geneva Bible, and the Bishops' Bible, culminated in 1611 in that of King James I. It must not be supposed that these are different translations. They are all no more than revisions of the work of Tyndale, as revised by him in 1534 and 1535. Fundamentally, therefore, they go back to the Greek text from which he worked, that is, to Erasmus's third edition of 1522. The Geneva revisers, it is true, made some use of Robert Estienne's fourth edition of 1551, in which the verse division now in common use first appeared, but Estienne's text was chiefly taken over from Erasmus's final edition of 1535, so that through their Greek sources as well as through their English their work rests mainly on Erasmus's text. The King James revisers, too, made some use of Theodore de Bèze's Greek Testament in its fourth edition of 1598, but it was based upon Estienne's fourth and so rested ultimately upon Erasmus. The immense importance of Erasmus's Greek text of the New Testament in the history of the Greek Testament and of its English translations must not be overlooked, although the weakness of its textual basis has had serious and far-reaching consequences.

It is true that the sixteenth century editors of the Greek New Testament took a decided interest in Greek manuscripts, and the younger Estienne (Henry) in particular was a diligent collator of their readings, and enriched the margins of some of the Estienne editions with his results. But these were seldom gathered from any manuscript of worth and seldom passed from the margin into the actual text. And yet manuscripts of real value were already within their reach and sometimes in their hands. The Royal Codex, of the ninth century, was already in Paris and was known to Estienne, and Bèze himself possessed in the famous manuscript that bears his name a text of the Gospels and Acts as old as the sixth century. Although he owned it from 1562 to 1581, when he gave it to the University of Cambridge, he does not seem to have made any serious use of it in his editions, perhaps because of its curious and frequent departures from the usual printed form of the text. But these did not deter Robert Estienne from putting many of its readings into the margins of his third edition.

II

The beginning of a new epoch in the study of the Greek text of the New Testament was marked by the coming of the great Alexandrian manuscript to London in 1628, seventeen years after the appearance of the King James Version. It was a Greek Bible of the fifth century, sent by the Patriarch of Constantinople as a present to King Charles I of England. It aroused great interest in England, and drew attention in a concrete and striking way to the better sources for the original Greek text, which now began to come from the East into the hands of Western scholars, and which are still coming. The fall of the Eastern Empire in 1453 had scattered Greek refugees over Italy, and some carried manuscripts with them. Others were picked up by travellers in the old Greek lands which had fallen under the rule of the Turks. Many further manuscripts were destroyed, and many remained undisturbed in such remote convent libraries as those of Athos or of the Pindus Mountains.

Peter Allix about 1700 discovered the underwriting on a twelfth century manuscript of Efrem the Syrian in the Royal Library at Paris, and found this earlier writing to be the text of the Old and New Testaments in Greek, in a hand of the fifth century. About a century later when Napoleon had brought the Vatican Codex from Rome to Paris, Leonard Hug examined it and saw the extraordinary excellence of its text, to which little attention had previously been paid, although it had lain in the Vatican Library almost since its foundation in the middle of the fifteenth century. The Vatican manuscript is from the fourth century and probably from the early years of it, so that its evidence carries our knowledge of the text a thousand years further back than that of Erasmus's leading manuscript.

The nineteenth century witnessed a great advance in Greek textual materials, especially through the skill and activity of Constantine Tischendorf. All his discoveries of manuscripts were eclipsed by his finding of the Sinaitic Codex in the Convent of St. Catharine on Mount Sinai in 1859. This manuscript, like that of the Vatican, dates from the fourth century, and its text is only inferior to that of the last-named. Together these great ancient manuscripts have put our knowledge of the ancient text on a new footing. But they do not stand alone. Scores of uncial—that is,

capital letter—manuscripts of the fifth to the ninth centuries have come to light, which help us to fill out the picture of the early text. In 1906 a traveller bought in Cairo two New Testament manuscripts of the fifth and sixth centuries, the former containing a remarkable text of the Gospels, and the papyrus discoveries of the past thirty years have brought us New Testament fragments as old as the end of the third century itself.

This immense array of textual materials has been worked upon with great diligence and skill by a long series of textual scholars like Tischendorf, Samuel Tregelles, F. H. A. Scrivener, Hermann von Soden, Bishop B. F. Westcott and Dr. F. J. A. Hort; the two last in particular have wrought their results into a text vastly more accurate than those of three and four centuries ago.

The recent editors have had not only a wealth of ancient Greek manuscripts to work on, but the versions of the New Testament made between the third and the seventh centuries have been published and have given the editors of the Greek text most valuable assistance. The Latin Vulgate has of course always been known to scholars, and some of the Oriental versions began to appear in printed editions in the middle of the sixteenth century. But modern times have witnessed a great advance in the accurate knowledge of the text of these long-known versions and the discovery of others formerly unknown. The New Testament did not simply pass into Syriac and Coptic, but into four dialects of Coptic and into six different Syriac versions. Fresh light is just now being thrown upon the Coptic versions by new manuscript discoveries.

Not only new materials and better editions of the ancient versions but better texts of the writings of the Greek, Latin and Oriental Fathers are coming to the aid of the textual critic and helping him to more and more definite and reliable conclusions as to the ancient Greek text.

At the close of his long labour on the text of the Greek Testament, Dr. Hort observed that while the number of variant readings contained in manuscripts and versions is very large, the residuum of really substantial variations affects hardly a thousandth part of the entire text.

A few readings only can be considered here. Nearly all serious students of the text now agree that Mark xvi. 9-20—the so-called Long Conclusion—is not a part of that Gospel, but was added

probably early in the second century to take the place of the original conclusion which had been lost by accident or removed by design. Ancient manuscripts and versions alike discredit it. The substance of the original conclusion can, it is believed by many scholars, be recovered from the parallel part of Matthew.

Scholarship is almost equally unanimous as to the story of the adulterous woman (John vii. 53-viii. 11), which is absent from the oldest manuscripts and versions, and probably crept into the text from the "Gospel of the Hebrews," a work which Eusebius says contained such a story. Only one Greek manuscript earlier than the eighth century contains it, and only one Greek Father before the tenth century shows any knowledge of its existence. Tischendorf fifty years ago said, "It is perfectly certain that it formed no part of the Gospel of John." The textual evidence since discovered confirms this judgment, and modern scholarship strongly concurs in it.

The case is quite as clear as to Acts viii. 37—Philip's words to the Ethiopian eunuch, and his confession of faith. These words stood in the Latin Vulgate and in the margin of one of Erasmus's two Greek manuscripts of Acts, but not in the text of either of them. But he put them into his Greek text and there they remained for centuries. Very few Greek manuscripts have ever been found containing them, and none of these is of any weight. Even the better manuscripts of the Vulgate omit them. The reading seems to have originated in the Old Latin version which preceded the Vulgate of Jerome, and represents a natural effort to answer the eunuch's question, "What is there to prevent my being baptized?"

The reference to the Three Heavenly Witnesses in 1 John v. 7 similarly found its way into the Greek text through the weakness of Erasmus. It did not stand in his Greek manuscripts, and he did not include it in his first or second editions, but admitted it into his third on being shown a contemporary Greek manuscript containing it, and thereafter with slight alterations it continued to stand in the Greek text and the English versions until modern times. There is no support for the passage in Greek manuscripts before the fourteenth century, when it shows clear traces of being translated from the Latin. The words first occurred in Latin toward the end of the fifth century, found their way into the Latin manu-



DAYS OF CREATION.

FIRST DAY.

(Copyright: Frederick Hollyer.)



By Sir EDWARD BURN-JONES, B.A.

SECOND DAY.

scripts of 1 John in the sixth century, and in the fourteenth passed into a few Greek manuscripts.

The case of interpolations like Luke xxii. 43-44 is only a little less clear. Some of the best Greek manuscripts contain this passage, but others equally good are without it. This seems inexplicable if it actually formed a part of the original Greek text. The soundest conclusion seems to be that it is an interpolation which crept into some early uncials but affected only a limited number of ancient manuscripts.

Luke xxiii. 34 is an interpolation of very much the same kind. The ancient Greek manuscripts are divided, but it is difficult to imagine why any scribe should have left such a verse out of his text. Its insertion is textually much more probable. A number of such short interpolations have been inserted in the closing chapters of Luke, and one is found in John v. 3-4.

The discovery of the Old Syriac text of the Gospels has brought to light a striking reading in Matthew i. 16: "Joseph, to whom the Virgin Mary was betrothed, begot Jesus who was called Christ." This has been adopted by some modern translators, but the ancient evidence is hardly sufficient as yet to establish the reading. A remarkable conjecture of J. Rendel Harris has thrown light on 1 Peter iii. 19, where he suggests that the name of Enoch has fallen out of the text by an error of the eye. The discovery of the Book of Enoch has shown that the first episode in that influential work was the sending of Enoch to the fallen angels. Moreover, the Greek words *ενωκαιενωχ* might easily have been misread as *ενωκαι* by an ancient scribe. Other passages in which the text of Westcott and Hort may be improved in detail will be suggested by an examination of their "Notes on Select Readings" in the second volume of "The New Testament in Greek." To these the present writer would add John xix. 19; Acts xix. 28, 34; James i. 17, iii. 6; and Revelation xiii. 1.

Apart from these specific textual problems, the chief general question is as to the origin of the so-called Western text. This is a form of text marked by fondness for paraphrase and interpolation, and important from the fact that Christian writers as early as the second half of the second century reflect its use. Yet it seems more like a textual tendency than a definite type of text, and is probably, as Hort thought, to be explained as due to the free private recopying

of the New Testament documents in early times before greater care for textual accuracy and uniformity began to be felt in Christian circles. Yet the Western text has an important contribution to make in its freedom from certain interpolations which affected many otherwise excellent non-Western manuscripts, and in the support it often gives to readings which are in themselves highly probable but for which the support of ancient manuscripts or versions is relatively slight.

Hardly less serious is the question whether the distinction so carefully made by Dr. Hort between the Neutral text and the Alexandrian can be successfully maintained. The striking support given to Dr. Hort's Neutral text by the papyrus discoveries made since his work was published is discounted by his critics, who say that his Neutral is really only the usual Egyptian text, which of course appears in papyri found in Egypt. Nevertheless his distinction between the Alexandrian text and a Neutral text preserved chiefly but not wholly at Alexandria has not been successfully assailed.

III

Meantime new light was being thrown upon the New Testament from quite a different source, through the astonishing discoveries of Greek papyri in Egypt. Two hundred years ago there was hardly a Greek papyrus in a library or museum of Europe. But about a century ago a mass of papyri was found at Sakkarah on the site of the Serapeum. In the years that followed English and other travellers in Egypt were from time to time able to buy literary papyri from natives—parts of Homer, orations of Hyperides, and a fragment of Alcman. These discoveries were made between 1820 and 1856.

A new and much more fruitful period in papyrus discovery began in 1877, when a great quantity of Greek papyri of all sorts was found near the site of Arsinoe in the Fayum. Most of these were from the Byzantine period, and the bulk of them went to the collection of the Archduke Rainer in Vienna. An even more important discovery was made in 1889-90, this time by the archæologist Professor Flinders Petrie, who in digging at Gurob found a number of mummies decorated with cartonnage made of waste paper glued together, whitened and painted.

The waste paper of which these mortuary furnishings were made was papyrus, and by careful dampening the papyri, often torn and crushed, they could be separated and deciphered. The Petrie papyri were from the Ptolemaic period. The earliest definite date they gave was 270 B.C., and most of them were evidently written between that time and 186 B.C. They were our first real introduction to the Greek, the writing, and the life of the Ptolemaic period (323 to 30 B.C.).

The fact that many of the pieces recovered were dated documents established presumptive dates for the undated literary pieces found with them, and began to create a firm foundation of definite knowledge for dating ancient literary manuscripts, indeed, for Greek paleography in general. It had usually been supposed that cursive or running Greek hands came into use in the ninth or tenth centuries, but the papyri previously found had shown that cursive hands were in use for all ordinary purposes in Byzantine times—that is, from Diocletian to the Arab Conquest, the uncial or capital letter being used for literary manuscripts only. But the Petrie papyri pushed back the cursive writing to the beginning of the third century before Christ, and showed that, as far as extant manuscripts go, it is as old as any uncial. It was in fact simply the common written hand which everybody used, while the uncial was the hand used in making copies of books for sale.

The papyri found at the Serapeum in 1820 had come from the second century before Christ, but it needed the weight, variety, and superior age of the Petrie papyri, with their specific dates, to set our knowledge of Ptolemaic papyrography upon a broad foundation.

They were speedily supplemented by the discovery in 1893 and 1894 of the revenue laws of Ptolemy Philadelphus, a great papyrus forty-two feet in length, much longer than any proper literary roll would be. These discoveries set the Ptolemaic pieces previously known in a new and clear perspective, and began to make the life, literature and language of that time familiar.

In 1894-96 D. G. Hogarth and B. P. Grenfell purchased in Egypt a great many dated documents of the second and first centuries before Christ, which made the picture of Ptolemaic life given by the papyri still more complete. To the classical scholar the greatest interest of these finds lay in the new fragments of classical or post-classical Greek literature which they supplied, but

the student of Christianity finds even greater interest in the private documents which they include and which reflect the everyday life and speech of the time.

In 1896 and 1897 Grenfell and A. S. Hunt, digging at Behnesa in Upper Egypt, uncovered the ancient town of Oxyrhynchus, and found among its rubbish-heaps the remains of the old Roman record office, the contents of which had been anciently cleared out and carried out of the town to be burned, but had not been entirely consumed. The sands had blown over them and preserved them for the modern excavators. The finding at Oxyrhynchus of a papyrus of "Sayings of Jesus," dating probably from about A.D. 200 or a little later, drew the attention of the world to the season's success.

The excavations were no less remarkable in other respects. The earliest known fragment of the Gospel of Matthew, a papyrus leaf from the end of the third century, offered new materials to the student of the Greek text, and many pieces of lost works of Greek classical literature gave us an increased respect for the literary tastes of these Greeks in Egypt. But the bulk of the Oxyrhynchus finds consisted of private or official documents dating from the first to the seventh centuries after Christ.

Especial interest attached to those from the first century, for few papyri of just that time had been found before. These documents were of every conceivable variety, letters, deeds, contracts, sales, leases, wills, petitions, reports, complaints, birth notices, death notices, invitations, divorces, accounts, lists, memoranda—in short, every kind of personal, business and social writing. Many of them were dated, and with their aid the student of Greek paleography at length found himself possessed of a practically continuous series of dated papyri from 270 B.C. to A.D. 680, a span of nearly a thousand years.

Much of this life is intimately known. The story of the twins employed at the Serapeum and the wrongs they suffered in the years 165–161 B.C., runs through almost a score of the Serapeum papyri; the labours and fortunes of the Roman veteran Gemellus, retired on a farm in the Fayum toward the end of the first century after Christ, are reflected in a sheaf of his own letters; and the correspondence of a Roman officer named Abinnæus constitutes a whole series of documents from the middle of the fourth century.

In 1900 Grenfell and Hunt undertook excavations in the Fayum on what proved to be the site of the ancient Tebtunis. Here they uncovered a crocodile cemetery but found few papyri, until one of the workmen in annoyance struck one of the crocodile mummies with his mattock and broke it open, disclosing the fact that inside its outer covering it was completely wrapped in papyrus. This led to the uncovering of all the other crocodile mummies found, and a great mass of Greek papyri, especially from the Ptolemaic period, was the result. In some cases a roll or two had been thrust into the crocodile's mouth, but these were seldom well preserved. The wrapping pieces were naturally large ones, and the results of the Tebtunis expedition, which was undertaken by the University of California, were on the whole very gratifying. Besides this wealth of Ptolemaic pieces, a mass of Roman papyri was also found, and twelve hundred pages of texts of Tebtunis papyri have been published.

The Ptolemaic pieces are almost all from the last twenty years of the second century before Christ, a few being as late as B.C. 73 or even 56. The Roman papyri are mostly from the second and third centuries after Christ, though a few bear dates early in the first century, of the years A.D. 3, 5, 10, 16, 23, 26 and 28.

In the spring of 1902 Grenfell and Hunt spent a few weeks at Hibeh in Upper Egypt and there excavated a Ptolemaic cemetery with good success. The mass of papyri they secured came from the third century before Christ and for the most part from the first half of that century. In the following season Ludwig Borchardt, excavating at Abusir near Memphis, found a roll of the lost "Persians" of the poet Timotheus of Miletus. This papyrus was assigned to the last years of the fourth century before Christ, and may fairly claim to be the oldest Greek book in existence. The date assigned to it was soon confirmed by the discovery at Elephantine of a dated Greek marriage contract of the year 311-310 B.C., written in the same style of handwriting. The papyrus discoveries have thus pushed definite knowledge of Greek paleography back to the very times of Alexander the Great.

IV

An important collection of Greek papyri, formed at the Royal Museum at Berlin, was being published by Berlin scholars in

volumes appearing in parts, when one of these parts came under the eye of a young scholar named Adolf Deissmann. His interest was aroused by a page carrying the name of one of these men, a friend of his, who had edited the document reproduced on that page. The name leading Deissmann to read the Greek text above it, he was struck with the thought, "Why, that is just like the New Testament!" His interest thus awakened led Deissmann to study the new papyrus documents carefully for the light they might throw on the New Testament, and his book "Bible Studies" was the result. This investigation of Deissmann's, since developed in his "Light from the East" and carried forward by other grammarians like James Hope Moulton, has led New Testament grammarians to a remarkable conclusion. They have decided that the Greek of the New Testament is the colloquial, vernacular Greek of its day, just such Greek as the papyri contain. As Moulton puts it, "The new linguistic facts now in evidence show with startling clearness that we have at last before us the language in which the Apostles and Evangelists wrote. The papyri exhibit in their writers a variety of literary education even wider than that observable in the New Testament, and we can match each sacred author with documents that in respect of Greek stand on about the same plane. The conclusion is that 'Biblical' Greek, except where it was translation Greek, was simply the vernacular of daily life." As Wellhausen says, "In the Gospels, spoken Greek, and indeed Greek spoken among the lower class, makes its entrance into literature." A. T. Robertson, in the third edition of his "Grammar of New Testament Greek," describes the New Testament as "chiefly in the vernacular *koine*," or Common Dialect.

We have long known that the New Testament is not written in classical Greek or even in the literary Greek of its day. Its language has indeed constituted a decided problem, so that Richard Rothe could speak of a "language of the Holy Ghost." "For in the Bible," he goes on, "it is evident that the Holy Spirit has been at work, moulding for itself a distinctively religious mode of expression out of the language of the country." And H. Cremer continues, "We have a very clear and striking proof of this in New Testament Greek." These opinions show how real a problem the Greek of the New Testament constituted to the theologians of an earlier day. Edwin Hatch wrongly contended that there was a

distinct Biblical Greek of which New Testament Greek was a variety. "Biblical Greek," he said, "is thus a language that stands by itself"; and Benjamin Jowett declared, "There seem to be reasons for doubting whether any considerable light can be thrown on the New Testament from the study of language." But Jowett did not have the papyri. Even Viteau in 1893 thought of New Testament Greek simply "as a variety of Hebraising Greek."

The position that the Greek of the New Testament was the everyday spoken Greek of its time is now generally held by New Testament philologists. Further researches into the papyrus literature, now fortunately so voluminous, fully confirm the position of the recent investigators. The New Testament was written in the language of common life. No one can wonder at this who reflects for a moment upon the public with which the early Church worked, or the way in which that literature began: in personal letters, always the most informal kind of written expression. And it is certainly fitting to recall that one source of misunderstanding between Paul and the Corinthians was what they considered the rudeness of his speech and composition, and that Paul in discussing this charge with them, does not deny it but admits it, and declares that he will not change his style or embellish his message with literary devices, lest his diction come to overshadow his message and the Cross of Christ be made of no account. The papyri have simply proved that Paul meant what he said. He wrote in straightforward, everyday language, and persons who insisted upon a Gospel clothed in the rhetorical fashions of the day had to go elsewhere for it.

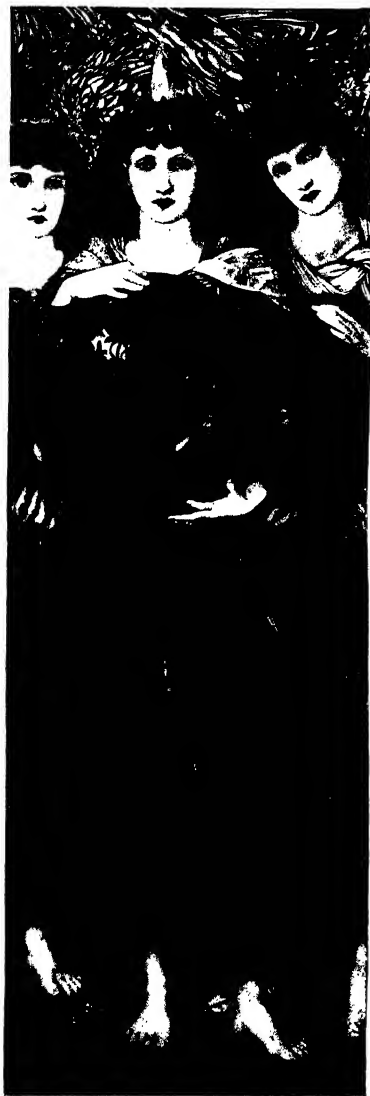
The great advances made in our knowledge of the New Testament, first by the discovery of the New Testament manuscripts and then by the discovery of the Greek papyri, are naturally reflected in the private translations of the New Testament. In the eighteenth and nineteenth centuries the improvement in the knowledge of Greek and of the ancient text of the New Testament led to numerous private translations, some of them from the hands of well-equipped scholars and of men of high literary, academic or ecclesiastical position. Such men as William Whiston, John Wesley, George Campbell, William Newcome and Henry Alford in England, and Samuel Mather, Charles Thomson, Alexander Campbell, Noah Webster, A. C. Kendrick, Andrews Norton, Thomas J. Conant and George R. Noyes in America, attempted

the revision or retranslation of the New Testament. With all these it was the change in the English language, the advance in the knowledge of Greek, or most of all the better Greek text which the manuscript discoveries had brought, that moved them to revise or translate. These efforts and discoveries culminated in the English Revision of 1870 to 1881, which especially reflected the advance in the knowledge of the text. In point of diction it was not, and was not intended to be, any less antique than the King James Version upon which it was based.

The new light more recently thrown by the papyrus discoveries upon the colloquial character of New Testament language was similarly reflected in a new movement for modern speech translations. This began toward the end of the nineteenth century and has become very general. Representatives of many Protestant denominations, and Roman Catholics as well, have undertaken to put the New Testament into English of the same colloquial character as that of the Greek in which it was written.

This feeling has led to the publication of a score of new translations since 1900, and so warmly have they been received by the religious public that they have for most people taken the place of commentaries as aids to the understanding of the New Testament. They have brought out the fact that the New Testament is not best understood by separate scattered verses, but was written to be read continuously and coherently. The New Testament has suffered from nothing so much as from the habit of plucking verses out of their contexts and using them as though they stood alone, without regard to what precedes or follows. From such juggling with the Scriptures people turn with relief to the private translations which seek to recover the continuity which the books of the New Testament originally had and were meant to have.

It has been proved that William Tyndale's version of four hundred years ago still fills nine-tenths of the King James New Testament and nearly as much of the Revised version. The papyri have demonstrated to the satisfaction of all schools of grammarians that the antique style of the times of Henry VIII is no longer appropriate to the Greek New Testament. The modern private translators have recognized this situation and sought to give to modern readers of the English New Testament a form of it faithful to the better modern knowledge of its true text, faithful to the better modern



DAYS OF CREATION.

THIRD DAY.



By Sir EDWARD BURNE-JONES, B.A.

FOURTH DAY.

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DAYS OF CREATION.

FIFTH DAY.

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By Sir EDWARD BURNE-JONES, Bart.

SIXTH DAY.

knowledge of the Greek language, and above all faithful to the essential colloquial quality of the Greek New Testament itself.

The papyri have not only transformed New Testament translation in its fundamental character; they have illumined New Testament grammar and enriched New Testament lexicography. Meantime the continued excavation by such men as D. G. Hogarth and W. M. Ramsay of the sites of Græco-Roman cities in Macedonia, Greece and Asia Minor have contributed much to our knowledge of New Testament times and thrown light on many a phrase or sentence formerly obscure in Luke or Paul. The contribution of the inscriptions and papyri to New Testament vocabulary is brought together in Moulton and Milligan's "Vocabulary of the Greek Testament illustrated from the Papyri and other Non-Literary Sources," now in course of publication. The papyri have informed us that "enrolments" every fourteen years were a regular thing under the early empire, and the inscriptions have shown us what the asiarchs and politarchs were. The new study of the Mystery cults has thrown fresh light upon the religious background of the time and the faiths with which Christianity had from the beginning to compete. Important information on this subject has been derived from works like Apuleius's "Metamorphoses" and discoveries like that of the "Isis Litany" (Oxyrhynchus Papyri, No. 1380) have given important information.

It is now clearly recognized that the New Testament will be best understood in the light of the literature and the life of its own time, and the study of early Christian literature has therefore assumed a new importance among Protestant scholars. Not only have early Christian documents long known been re-studied and re-edited from better manuscript sources (as by the scholars of Oxford and Cambridge and of the Royal Prussian Academy), but new texts have been discovered, some of them of great antiquity and actually contemporary with the later parts of the New Testament itself, by the aid of which the real genius of Christianity emerges into clearer light.

In 1842 Minas Minoides visited Mount Athos, that extraordinary promontory jutting into the north-west corner of the Ægean Sea, and tenanted since the ninth century, at any rate, by Greek monks,

whose successors are now gathered in twenty monasteries. From one of these Minoides took to Paris a unique Greek manuscript of what has turned out to be the lost "Refutation of All Heresies" from the hand of Hippolytus of Rome. The first book of this great work had been known since 1701, but under the name of the "Philosophoumena" of Origen, and to this work the newly-discovered books were at first ascribed. They were later identified, however, as books iv-x, or possibly even books ii-x, of Hippolytus's famous "Refutation of all Heresies," which had long since disappeared.

A few years later a certain Simonides visited Athos. There, in the convent of St. Gregory, he found nine paper leaves of the fifteenth century containing the first nine-tenths of the Greek text of the famous "Shepherd of Hermas," a work written in Rome in the first half of the second century, and at one time accepted, in Alexandria at least, as part of the New Testament. The last leaf, which would have completed the text, was probably missing when Simonides made his discovery. He carried three of the leaves away with him from Athos, and also copies none too accurate of the other six. These he disposed of about 1855 to scholars at Leipsic, where they are now. His work was discredited by his subsequent conviction as a forger. But S. P. Lambros in 1880 found at the Convent of St. Gregory the six leaves Simonides claimed to have copied, and K. Lake in 1907 published them in photographic facsimile. The most careful search has thus far failed to disclose the tenth leaf, but the Athos discovery gave scholars their first Greek text of most of "The Shepherd," one of the most influential and well-known books of the second century. Tischendorf in 1859 found in the Sinaitic Codex a better Greek text of the first quarter of the work, but the last tenth, which occupied the final leaf of the Athos manuscript, has not yet been found. Many papyrus fragments of "The Shepherd" in the original Greek have come to light in recent years, some of them belonging to the part missing in the Athos leaves, but as yet these discoveries have not filled the gap and completed the text.

When Tischendorf found the Sinaitic Codex at the Convent of St. Catharine on Mount Sinai in 1859, he was quick to observe that it included not only a part of "The Shepherd," but the Greek "Epistle of Barnabas," no complete Greek text of which was at that time known to scholars. It is related that Tischendorf, on

being shown the manuscript for which he had been searching for fifteen years, and fearing that it might be taken from him next morning and never seen by him again, sat up all that night to copy this Greek text of the "Epistle of Barnabas," in order that it at least might not be lost to scholarship. According to the most likely view the "Epistle of Barnabas" was written about A.D. 130, probably in Syria. It reflects a highly allegorical and anti-Jewish type of Christian thought. Only one other complete Greek manuscript of it has ever been found, the famous Constantinople manuscript discovered by Philotheus Bryennius in 1875 and now in Jerusalem. But it is a manuscript of A.D. 1056, while the Sinaitic Codex belongs to the fourth century. It is a striking fact that the oldest manuscript which preserves "Barnabas" and part of "Hermas" is a Greek Bible, which included these works as recognized parts of the New Testament.

In 1875 Bryennius published, from the Constantinople manuscript of A.D. 1056, the first complete Greek text of the "Epistles of Clement." The bulk of these epistles had been known in Greek ever since the coming of the Alexandrian Codex to England in 1628, but in that manuscript neither epistle was complete, one leaf of the first and two-fifths of the second being lost. The Constantinople manuscript supplied these long-missing portions, and put students of early Christianity in possession of complete Greek texts of these epistles, of which the first is among the earliest works of Christian literature, being probably contemporary with the Revelation of John and the Epistle to the Hebrews.

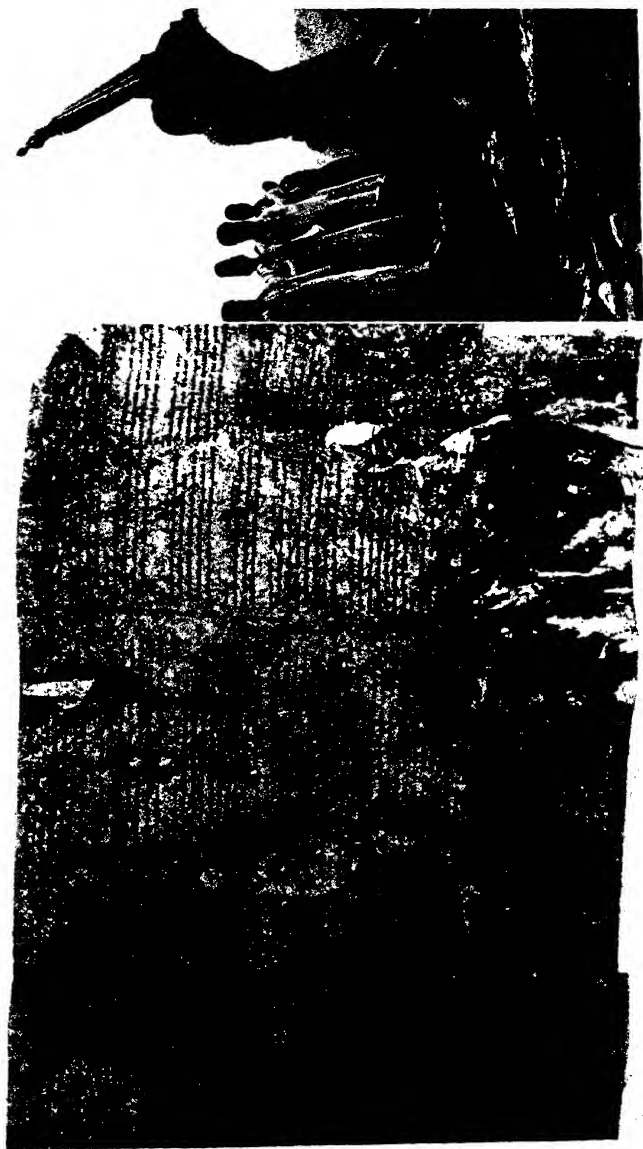
In publishing the text of these epistles from the Constantinople manuscript, Bryennius naturally gave an account of that codex and its contents, and Western scholars noticed among these not only the "Epistle of Barnabas," but the "Teaching (Didache) of the Twelve Apostles," a work mentioned by Eusebius and Athanasius but long since lost and forgotten. The interest aroused by this title led Bryennius to publish the text of the "Didache" in 1883, and it proved to be a document of extraordinary significance, dating in its present form from about A.D. 150. So great was the interest aroused by its publication that a small library of learned works about it was immediately produced by scholars of Europe, England and America, and it has been included in the subsequent editions of the "Apostolic Fathers."

In 1883 Agostino Ciasca, a member of the staff of the Vatican Library, announced the existence in that library of the long lost "Diatessaron" of Tatian, in an Arabic version, of the thirteenth or fourteenth century. The "Diatessaron" was a well-known work of early Christian literature, and was for two centuries the favourite form in which the Gospels circulated among Syriac-speaking Christians. But there had been great uncertainty as to its precise scope, method, and text, on which the remains of an Armenian version of a Syriac commentary on the work by Efreem the Syrian threw a little light. In 1886 Antonius Morcos, the Visitor-Apostolic of the Catholic Copts, was in Rome and on being shown the manuscript by Ciasca remarked that there was a manuscript of the same work in Egypt and that he could secure it for him. This he did, and on the basis of these manuscripts Ciasca in 1888 published the Arabic text. The Arabic version was made in the eleventh century from the Syriac, and confirms the statement of Victor of Capua (about A.D. 550) that his Latin Gospel harmony contained in the Fuldensian Codex is based on a Latin version of Tatian's work. While the precise text of Tatian's "Diatessaron," as it originally circulated in Syriac, still remains in some obscurity, its character and substantial contents are no longer in doubt. It was an interweaving of the four Gospels made about A.D. 172 by Tatian, the pupil of Justin Martyr, for use in his pioneer missionary labours among the Syriac-speaking population about Edessa.

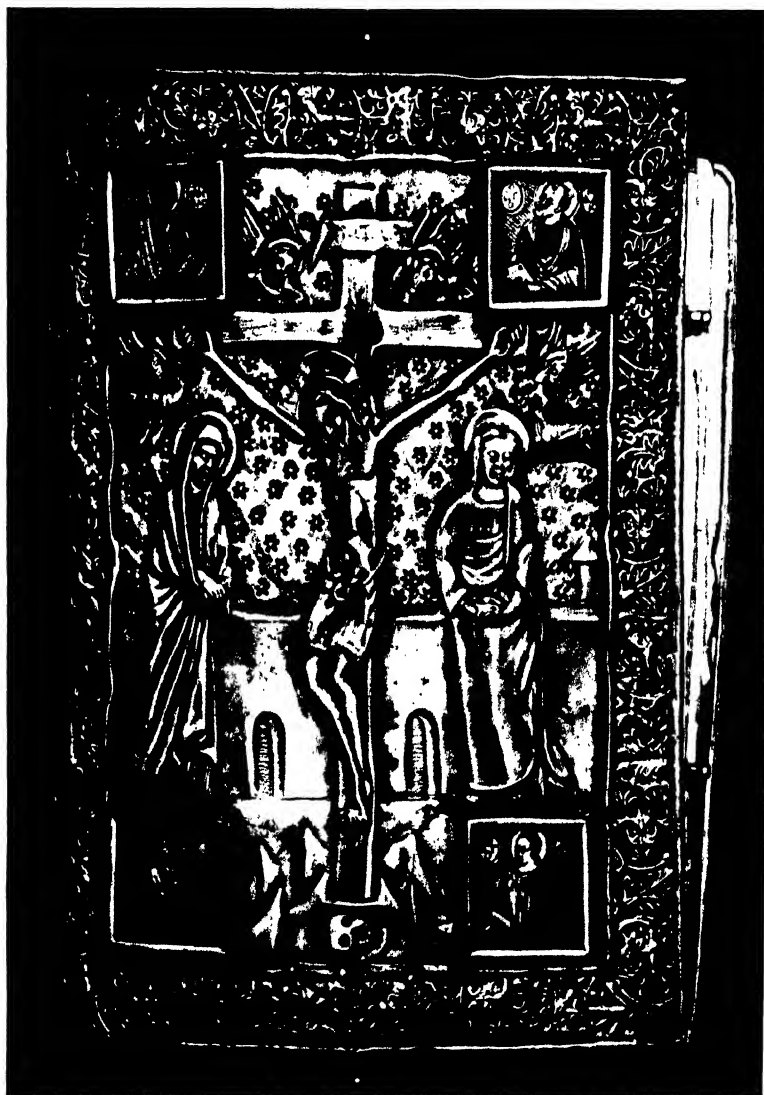
VI

In 1886 there was found in the grave of a monk near Akhmim in Egypt, a small parchment book of the eighth century containing three literary fragments of extraordinary interest. One was from the "Gospel of Peter," a book mentioned by Serapion of Antioch about A.D. 200, by Origen, and by Eusebius, and composed probably about A.D. 150, with the aid of our four canonical Gospels. It has a strong Docetic colour, seeking to show the unreality of Christ's Passion. The Akhmim fragment is the longest continuous fragment we possess of an uncanonical Gospel of any such antiquity. Serapion's account of it shows that at the end of the second century it was in some districts read with respect even outside of Docetic circles.

The same little manuscript contained also a fragment of the lost



A PORTION OF THE SAMARITAN SCROLL, AND A SAMARITAN HIGH PRIEST ELEVATING THE SCROLL BEFORE THE CONGREGATION.



COVER OF THE MOST PRIZED MS. IN THE LIBRARY OF ST. CATHERINE'S MONASTERY,
MOUNT SINAI.

"Revelation of Peter," first mentioned about A.D. 200 in the Muratorian fragment, as a part of the New Testament, "which some will not allow to be read in church." It was well known to Clement of Alexandria, Eusebius and Sozomen, in whose day, the first part of the fifth century, it was still read on Good Friday in certain churches of Palestine. The old lists of Biblical books credit it with a length of 270 (Clermont Catalogue) to 300 (Nicephorus's list) *stichoi*, or lines of Homeric length. It thus had at one time a place, though a precarious one, in the New Testament canon, and was about the length of Colossians, or a little longer. The Akhmim fragment is a little less than half that long. But the fact that our fragment is also found in an Ethiopic version embedded in one of the Ethiopic "Books of Clement" has led to the identification of the rest of the work in the adjacent parts of that book, so that we now possess in all likelihood at least in Ethiopic the complete text of the famous "Revelation of Peter," which was probably written early in the second century, and reflects the influence of pagan (probably Greek and Egyptian) ideas of heaven and hell upon early Christian thought. The authors of many later works, such as the "Acts of Thomas," made use of it, and the influence, direct or indirect, of the "Revelation of Peter," and to a less extent of the "Shepherd of Hermas," upon Dante cannot be doubted.

The third fragment contained in the little parchment book from Akhmim was from the Jewish "Book of Enoch," an Ethiopic version of which was discovered in Abyssinia by James Bruce in 1773, but about the existence of which in Greek there had been some doubt. While not properly a part of Christian literature, "Enoch" was written in the last centuries before the Christian era, and has sometimes been described as the most influential book in Palestine during the times of Jesus. The Akhmim fragment includes the first thirty chapters of the work, and its value and interest for early Christian thought is very great. While the work is believed to have been composed in Hebrew or possibly Aramaic, the Ethiopic version was based upon a Greek form of it similar to the one from which the Akhmim fragment comes. The "Book of Enoch" is expressly quoted in the "Epistle of Jude" and often reflected in the New Testament.

In 1889 J. Rendel Harris found in the library of the Convent of St. Catharine on Mount Sinai a Syriac version of the lost "Apology

of Aristides," in a manuscript of the seventh century. This "Apology," which is mentioned by Eusebius and Jerome, was originally written in Greek probably between the years A.D. 138 and 147, and was addressed to the emperor Antoninus Pius. It is the earliest of the Christian apologies that has come to light, although we know of the existence of earlier apologetic works such as the "Preaching of Peter" and the "Apology of Quadratus," of which fragments have been preserved. The discovery of the Syriac version of the "Apology of Aristides" led to the further discovery of most of the original Greek text embedded in the mediæval romance of "Barlaam and Joasaph," extant in many Greek manuscripts. The "Apology" was evidently adapted by the mediæval author of the romance and made to do duty as a defence of Christianity, which he put into the mouth of one of his characters. More recently other Greek fragments of the original "Apology" have appeared. It will be seen that early Christian apologetic literature is carried one step further back toward its beginnings by the recovery of the "Apology of Aristides."

In 1896 Reinhardt purchased from an Akhmim dealer a Coptic book, written on papyrus but very fragmentary, which proved to be a translation of the "Acts of Paul." Such a work is often mentioned by early Christian writers like Origen and Eusebius. Hippolytus made use of it, and the old lists of Biblical books included it and gave its length at 3,600 lines, which would be more than twice the length of the Gospel of Mark. The familiar "Acts of Paul and Thecla," extant in Greek and in a number of versions, now turns out to be simply the most popular chapter of the "Acts of Paul," which came to circulate separately and so escaped the oblivion which overtook the complete work. It was this chapter which so angered Tertullian and led him to search out the author of the "Acts." He turned out to be a pious presbyter of Asia who acknowledged having written it out of love for Paul. The "Acts" must have been written about A.D. 170, with the design of making the figure of Paul interesting to the Christians of that day and of accommodating his rather Jewish views as to the place of women in the Church to the freer Greek ideas of the time.

The "Acts" record a rambling story of Paul's wanderings from Antioch in Pisidia to Iconium, Myra and Perga, thence to Sidon, Tyre and Philippi, and finally to Rome, where he suffers martyrdom.

Other episodes, such as one related by Nicephorus about his being delivered from the lions at Ephesus, probably belonged to the "Acts" when complete, and Origen says that the "Acts of Paul" contained the words of Jesus, "I go to be crucified again." These words were the answer to Peter's question, "Domine, quo vadis?" and must have formed part of the martyrdom of Peter. It seems probable, therefore, that the famous story of Peter's death, with its account of his meeting with Jesus outside the walls of Rome and his return to the city to suffer martyrdom, belonged originally to the "Acts of Paul."

A second fragment of "Sayings of Jesus," apparently from the beginning of the same work, was discovered at Oxyrhynchus in 1903. While some of these "Sayings" resemble those already known to us from the canonical Gospels, the new element is so marked that it is probable they were collected for devotional use about the middle of the second century from the "Gospel to the Egyptians," or more probably the "Gospel of the Hebrews," which were current in Egypt at that time. The importance of this discovery is all the greater when it is remembered how slight our information is as to the early Christianity of Egypt.

In the second season at Oxyrhynchus two little Gospel fragments came to light. One, dating from the early part of the third century, shows a striking resemblance to a passage quoted by Clement of Alexandria from the lost "Gospel of the Egyptians," and is very probably a fragment of it. The other is more considerable, containing on the two sides of a tiny leaf from a fourth century book no less than two hundred words reporting a conversation between Jesus and a Pharisee about purification. A phrase in it recalls the language of the "Gospel of the Hebrews," but if the fragment comes from that Gospel it must be from a late and expanded form of it, for the existence of which there are several pieces of evidence.

VII

One of the leading Christian figures of the late second century is Irenæus of Lyons. He was born in Asia Minor and visited Rome, but did his most notable work in Gaul. As he is the first Christian writer to reflect clearly the Catholic movement, he is sometimes called the first Catholic Father. Up to 1904 only one complete work of his was known to be extant, his book "Against Heresies," and

that only in a Latin version. In the same year an Armenian scholar found at Erivan an Armenian version of his work "In Proof of the Apostolic Preaching," which Eusebius mentions as among the writings of Irenæus. It is no small gain that we now possess in full two of Irenæus's major works. The newly-discovered one is addressed to the laity, and in it we see Irenæus teaching his people in Gaul how to defend their faith in their apostolic Christianity by appealing to the Old Testament.

Early in 1909 J. Rendel Harris, the discoverer of the "Apology of Aristides," found among some Syriac manuscripts in his possession, a translation of the long-lost "Odes of Solomon." Dr. Harris had accumulated on his visits to Asia Minor and Syria a collection of Syriac manuscripts, old and new, and this one, three or four hundred years old, he had taken for a Syriac psalter and had postponed a closer study of it until more interesting pieces of work were done. On recognizing its real character he proceeded at once to publish its text, which proved remarkably interesting.

The "Odes of Solomon" are mentioned in lists of Biblical books of the sixth and ninth centuries, along with the "Psalms of Solomon," and they are quoted in the "Pistis Sophia" of the third century, and in Lactantius's "Divine Institutes," in the early fourth. They were forty-two in number, but the first two are lacking in the Harris manuscript. One of these is fortunately supplied by the "Pistis Sophia," in which it is quoted, apparently in full. They have nothing to do with Solomon, except to reflect the memory that, as the "Book of Kings" says, "he spake three thousand proverbs, and his songs (odes) were a thousand and five."

The "Odes" prove to be Christian hymns, perhaps with a considerable Jewish basis, and they date from the first part of the second century. They constitute nothing less than the first Christian hymn book that has come down to us, and perhaps that ever existed. They are, as Harris himself said, "redolent of antiquity and radiant with spiritual light." In them we actually see the stream of Jewish psalmody entering the current of Christian hymnology, and the history of the combined movements is now at least structurally complete. For we see how the Hebrew psalms developed from their earliest beginnings, on through the period of the exile and the Maccabees, to be followed by the still later "Psalms of Solomon," songs of the Pharisees of the first century before Christ. With

the Lucan canticles and the new "Odes of Solomon" Christian hymnology is begun and the series becomes complete. The "Odes" come to us from a time when the New Testament was still being written, and they reflect a strangely interesting mystical type of Christian experience. They constitute a really independent source for the study of very early Christian life and thought.

A curious sequel to Professor Harris's discovery was the finding by Professor F. C. Burkitt of another Syriac manuscript of the "Odes" among the manuscripts brought back to the British Museum seventy years before, by Archdeacon Henry Tattam from the Nitrian monasteries of Egypt.

We have always known, from the statements of the New Testament and of ancient writers like Pliny, for example, that hymns formed a prominent part in the worship of the early Church, but except for a few verses in Luke and some fragments in the Epistles we have had no idea of them. It is no small satisfaction, therefore, to become possessed of so significant a collection as this hymn book. Its hymns are not mainly doctrinal, but devotional; they show little use of Christian literature, and contain few historical allusions. Their great words are like those of the Gospel of John—truth, love, hope, grace, joy, light, life, peace. The famous saying ascribed to Augustine, "Join thyself to the eternal God and thou shalt be eternal," seems to be a quotation of the third of these "Odes": "He that is joined to Him that is immortal will himself become immortal!"

The "Odes" have called forth a wealth of discussion, and yet much still remains to be decided. We are not sure in what land or even in what language they were composed. But they have shown us the early Church in a new and most elusive aspect, the devotional one.

In 1911 a young scholar of the University of Athens found in the Meteoron monastery on one of the pinnacles of the Pindus Mountains in northern Greece a tenth century manuscript of what proved to be an incomplete commentary on the Revelation of John from the hand of Origen. Origen was the founder of Christian interpretation, the leading theologian of Christian antiquity, and the father of ecclesiastical science. These thirty-seven paragraphs of a commentary on Revelation are a great and unexpected legacy from him, for it had not been supposed that he commented upon

that book. But in his "Commentary on Matthew," which is one of his last works, he does express the intention of producing a commentary on the Revelation, and the paragraphs discovered in 1911 are evidently the fulfilment of that intention. The "Commentary on Matthew" was written between A.D. 245 and 249, and in 249 or 250 the persecution of Decius came, and Origen was seized and so tortured that he soon after died, in his seventieth year. It would seem that the persecution actually interrupted Origen in the midst of his work on the Revelation, so that the part of it so recently found is the very last of his works.

In 1919 Dr. Carl Schmidt published from a Coptic manuscript of the fourth or fifth century, with the support of a later Ethiopic version, the "Epistle of the Apostles," a work not mentioned by ancient writers, but unmistakably from a very early period of Christian history. The Ethiopic form of it had been previously published in the "Patrologia Orientalis" as the "Testament of our Lord in Galilee," but its identity with the Coptic "Epistle of the Apostles" is clear. The "Epistle" takes the form of an account of the Resurrection of Jesus and His subsequent conversations with His apostles. In these they are instructed to observe the Lord's Supper until His return, which seems to be set for A.D. 150. The "Epistle" was probably composed not long before that time, for the sects are already rife, and the work is largely devoted to warnings against Docetism and Gnosticism. It shows clear traces of the use of the four Gospels and the Acts, and is especially concerned to endorse Paul and foretell his work among the Gentiles. So much of the book is apocalyptic in character that it is almost entitled to rank as an apocalypse. Its length is a little less than that of the Epistle to the Romans. It was probably written in Greek, and it seems to have originated in Western Asia Minor. We are uncertain of its original name, as the Coptic manuscript has lost its opening pages. The presence of the word "epistola" on a fifth century fragment of it at Vienna, and the introduction of the Apostles in the first person in the opening lines—"We, John, Thomas, Peter, Andrew, James, Philip, Bartholomew, Matthew, Nathanael, Judas, Zelotes and Cephas write unto the churches of the east and the west, of the north and the south"—combine to suggest the name, the "Epistle of the Apostles." The theology is primitive; Christianity is still the affair of the common people. The Catholicism of the times

of Irenæus has not set in, though many clauses of its baptismal creed are emphatically present.

While this record is by no means complete, it will be seen that recent years have brought us a little library of ancient Christian literature. They have not only notably increased the literary remains of Hippolytus, Irenæus and Origen, but they have brought us older Christian books which had for centuries been mere names, and for some of which the very names had been forgotten. The astonishing thing is that so many of these discoveries are works of the second century and especially of the first half of it, a time of the utmost significance. The "Teaching of the Apostles," the "Apology of Aristides," the "Epistle of the Apostles" and the "Odes of Solomon" have afforded us fresh sources for this obscure and important time. The history of the New Testament books, the rise of the New Testament canon, the development of Church polity, and the emergence of the earliest creeds all become clearer in the light of these new documents, and they in no uncertain tones confirm that impression of religious freedom and ecclesiastical independence which historical scholarship has maintained characterized Christianity in the first, second and third quarters of the second century.

With such literary recoveries behind us, we may confidently expect things equally important from the discoveries still to come. It would be easy to make a list of literary desiderata for which the New Testament student looks and longs. There is every reason to believe that the new generation will witness the finding of some of the most important of them as Oriental versions and Egyptian sites are more and more rigorously explored.

manent contributions in the field of New Testament criticism occur the names of the English scientist Joseph Priestley, the Dutch jurist Hugo Grotius, the literary geniuses Herder, Lessing, and Coleridge, besides classicists and experts drawn from the other theological disciplines. It has enlisted general discussion and universal scrutiny of moot points. The study of the New Testament cannot be the private domain of a few technical experts. The public interest has constantly demanded to know the results of criticism and—as far as they could be made plain—its grounds and methods.

On the other hand, the New Testament has suffered much in the house of its friends. Mistaken loyalty to certain old traditions or to certain new theories has often been the cause of obscuring its true character and contents. Over-zealous defence has called forth over-zealous attack. Partisanship in religious belief and ritual has twisted them for partisan uses. Philosophers, quite free themselves from superstitious regard for the volume, could not neglect it, so significant was its history and influence; often they tortured it to fit their own philosophic formulas. More than any other book the New Testament has had to wait and still must wait for enlightenment in many other fields of knowledge before receiving fair treatment. Prepossessions linger about it the longest, as the clouds cling longest to the highest peaks of the mountains. The truth about it has not often come to men by passive waiting, it has been won step by step with effort and struggle. The dust of strife has never been allowed to settle so that clear light could shine, but men have had to grope rather than see.

The reader need not expect, therefore, to find in this review the dramatic scenes, the romantic discoveries, the outstanding pioneers or the clear-cut controversies that meet him elsewhere in what has been called "the warfare between science and theology." Nevertheless he should read between the lines of popular and general description the thrill of adventure that new evidences and theories bring to the explorers themselves, the poignant realization by devoted saints of the revolutionizing effect of honest examination upon the ancient bases of religious faith, the enthusiasm of every effort made fearlessly yet with reverence to solve the unanswered questions of the most treasured Book, no matter how minor or technical any feature in the quest might be.

I

The Reformation itself set in motion several forces which tended to a new interest in Scripture. The reformers turned direct to it for authority, for argument and for consolation. The Reformation brought also a release from tradition. This freedom was only partially understood or practised at first. But when once the bonds of the past were loosed, Scripture logically won the right to be heard without prejudice and without restraint, until the words of the Apostle have become fulfilled: "The word of God is not bound." The Reformation vastly increased the general knowledge of the Bible by providing translations in the modern languages, like the German Bible of Luther and the English Versions from Tyndale's to that which is associated with the name of King James I. Many who could never understand the Latin language, in which alone the Bible was previously known to Western Europe, could read it now in their ordinary speech or at least understand it when others read it aloud.

The Protestants do not deserve all the credit for this new knowledge of the Bible. The Roman Catholic Church came far in the same direction—toward more thorough searching of the Scriptures, more untrammelled inquiry into the meaning of the original authors in the original tongues. The humanistic movement or revival of learning, not in itself religious and often frankly pagan, contributed to a sounder Bible study by the recovery of a knowledge of Greek, the language in which the New Testament was originally written. It also assisted the Protestant revolt from tradition, it corrected and challenged the dogmatic tendency in both the Protestant and the Catholic use of the Bible, and it cultivated the intellectual curiosity and the scientific temper which have so greatly assisted more recent criticism. The study of the Bible was removed from the cloister into the freer atmosphere of the university.

All these liberating forces worked but slowly and imperfectly. More modern tendencies have added new incentives and new tools, but in reviewing the past the student can only wonder that knowledge has dawned so partially and so gradually. Viewpoints which to us seem quite obvious, methods which are the commonplace of all our thinking, were achieved with the utmost difficulty, first by isolated individuals, pioneers and victims of persecution, and then by wider groups of intelligent Christians. To evaluate the accomplishment

of the years it is necessary to understand something of the inertia and other limitations under which readers of the New Testament lived two or three centuries ago. To invent the tools of criticism was in itself a most difficult task, and only after this task had been accomplished could the tools be used and the results be secured.

This difficulty is well illustrated by the history of interpretation. There are, no doubt, in the New Testament not a few passages of which one may well say, as Peter says of Paul's letters, that "there are many things hard to be understood," but most of the text yields a simple and clear meaning to any direct common-sense reading. The strange fact is that the New Testament was so rarely read in this way, and that through the Middle Ages and afterwards it was held subject to various external standards. The independent and often intelligent commentators of the first Christian centuries had been succeeded by those who interpreted Scripture according to tradition. The mediæval scholar aimed to learn the sense of a passage not by first-hand study but by inquiry into what "the Fathers" had said it meant. There was believed to be in the inspired word not merely a single but a manifold sense. Beside the literal thought two or three others were found—the moral, the allegorical, and the mystical. The allegorical use of Scripture had long been established in the Church—a method which had been applied by the Alexandrian scholars to the interpretation of Homer, and by Philo and Paul to that of the Old Testament. It has long outlasted its usefulness in modern times and has usually served to obscure the real meaning and interest of the apostolic writings.

Thus, although the interpretation of the New Testament is not in itself a branch of criticism but merely a tool, and is most effective when it is most simple and natural, the researches of the last century into the New Testament were largely delayed and are still delayed by artificial theories and presuppositions about interpretation. The imperceptible decay of these theories, the emergence of an honest effort freed from apologetic, controversial or hostile bias, to understand exactly what the New Testament writers really wished to convey to their readers—this alone has made possible that progress in knowledge about all phases of the New Testament which more recent generations have begun to witness.

It is needless to say that changed views about inspiration also have affected and been affected by Biblical study. Not only has the

higher criticism of the Bible undermined the view of literal inspiration, but so have two kindred investigations: the study of the transmission of the text, and the study of the process by which the contents of the New Testament became fixed. Lower or textual criticism is the effort to recover from the variant readings of Greek manuscripts, translations and quotations of the New Testament in its original wording. In itself it is an exacting and voluminous undertaking, and a labour of love to which a series of scholars have devoted their lives for many generations, not without real success. It was their discovery—that the exact words of Scripture had not been uniformly transmitted—which in the seventeenth century produced a new attitude towards inspiration and gave an opening to the higher criticism. The earliest controversies were waged about variations in the manuscript evidence. The use of sound principles of textual criticism, such as the Cambridge University scholars, Richard Bentley and Richard Porson, had learned to apply to classical authors, only brought down on their heads abuse and ecclesiastical opposition. Erasmus was violently attacked for omitting from his first edition of the Greek Testament the passage in 1 John concerning the Three Heavenly Witnesses (the Father, the Word, and the Holy Spirit), because only Latin manuscripts contained it. In like manner a study of the factors which finally determined the canon or list of the New Testament books, and the discovery of the early uncertainty about its limits as well as the reformers' own free criticism of its selection, undermined the tradition which assigned a unique kind of inspiration to these twenty-seven writings. These two disciplines are not strictly part of the higher criticism of the New Testament, but like the theological doctrine of inspiration and the theory and practice of the technique of interpretation, they have been closely associated with all retardation or advance in the parallel lines of research.

An important department of the study of the New Testament has been the inquiry into its origins, both as a whole and in its several parts. This includes all questions concerning the circumstances which gave rise to the various writings. It is technically called "Introduction." Evidently, however, only under the more recent phases of the history of interpretation could such a branch of

learning flourish. The older interpreters were quite indifferent to the bearing of the original author's circumstances and special purpose. The meaning of Scripture, or rather its meanings, were to be determined, they believed, by the tradition of the Fathers, or the creeds of the Church, or the assumptions of some given school of philosophy. To the modern critic, on the other hand, the original sense is the principal if not the only interest in Scripture. He wishes to understand the writer's mind, and for that purpose studies as carefully as he may everything in the text and out of it which will bring him into touch with the circumstances of writing, the time and place, the identity and individuality of the writer, his original readers and his purpose in writing. He prefers to deal with the Greek text rather than with any translation. He is willing to make long and tedious endeavours to discover as nearly as possible the exact shade of meaning which every word originally conveyed, even though no controversial point of doctrine can be proved by it.

It must not be overlooked that the modern study of the Bible's origin is due also to a new idea of its inspiration, to which in turn the study has itself contributed. The mediæval principles of interpretation obscured the human and natural factor in the Bible's origin. When the sacred text is regarded as dictated verbatim from heaven, when its human authors are imagined as quite removed from temporal or personal influences in their composition or recording of the divine oracles, their circumstances can have comparatively little bearing on the interpretation or the origin of the books. Mechanical inspiration logically excludes the need and the value of historical criticism, and while the doctrine of mechanical inspiration was often denied in the past and is often retained in the present, its decline in scope and influence in modern times is an essential concomitant of the emergence of an historical interest in the New Testament writings. Even the more conservative view of inspiration now concedes that it is the spirit rather than the letter of Scripture that is inspired—the persons and events rather than the records. It perceives that the several writers were men of like passions with ourselves, and that they must needs speak in accordance with their personal circumstances and individuality, and with the thought and situation of their times.

III

A question that absorbed an extraordinary amount of attention in the nineteenth century was the identification of the authors of the several New Testament books. Of course authorship is a clue to understanding, but the disproportionate emphasis laid on this problem was more due to other motives—largely controversial—than to a mere interest in the setting of the writings. Each of these writings came down from antiquity with an author's name and with a brief traditional theory of its origin. These names were either apostolic or the equivalent, and it was a part of the theory of the New Testament that divine inspiration was limited to Apostles or apostolic men, just as in the Old Testament it was limited by a similar theory to prophets. It was strangely difficult for the orthodox to assume, even with their doctrine of literal inspiration, that it made no difference who served as scribe for the Holy Spirit's dictation. They retained the ecclesiastical prejudice in favour of apostolic authorship. It was abhorrent to them that a New Testament writing should have been composed by a layman, so to speak. It was even more abhorrent that his name should be unknown. The traditional names have therefore been tenaciously defended and still receive more respect than they usually deserve.

Isolated attacks on these traditions were made by the reformers and their successors. They expressed doubts such as were current even in the days of Origen and Eusebius. Their objections were based mostly on theological grounds, as when Luther condemned the Epistle of James, though they occasionally supported them with arguments worthy of genuine literary criticism. The issue was most vigorously joined, however, when the historical accuracy of the New Testament was questioned—especially in the case of the narrative books. The traditional authorship of every book was challenged first or last, and in every case denied by some. One cannot speak of these controversies as though they had yet reached any assured results.

The results of this discussion—if we may include uncertainty as a result along with probable solutions—have been decidedly instructive. They are most easily considered in the case of Paul the Apostle, to whom tradition assigned a full half of the items in the New Testament's table of contents.

The Epistle to the Hebrews is now generally agreed not to be his

work. It makes no claim to his authorship, has little likeness to his style or thought, and was recognized as not his by many early Christians. Its author cannot be positively identified with Apollos, Barnabas, Priscilla, or any other of the few early Christians known to us by name, albeit the individuality of the author's style and his keenness of mind must be acknowledged.

It is more difficult to deny Paul the authorship of the thirteen other letters. They all bear his name in the text, they contain similarities of style and vocabulary, while their personal notes and references suggest real letters written out of a definite and genuine situation by the great Apostle himself. Where they seem to conflict with the Book of Acts, their verisimilitude commends their version, even at the expense of Acts, though a few Dutch scholars have preferred to reject all of them and to accept Acts instead. Even in its most sceptical phase German scholarship admitted the genuineness of the four chief letters—those to the Corinthians, the Galatians, and Romans, and now there are few in any land who will deny Paul several of the others. The lifelike note to Philemon seems unmistakably genuine. There is little reason to doubt that Paul wrote 1 Thessalonians and Philippians; 2 Thessalonians, Colossians, and Ephesians come next in probability of genuineness, though the likeness between the last two and certain details in each of them have caused hesitation.

The two letters to Timothy and one to Titus are closely connected and form a separate group. It is difficult to suppose Paul wrote them as they now read. So much in them is foreign to his style, thought, and situation as known to us from the acknowledged letters. Efforts to explain them by the extensive influence of Paul's amanuensis or as emanating from the changed conditions and divergent style of a much later period of Paul's life, or even as merely including genuine Pauline fragments, are unsatisfactory. There remains the alternative of pseudonymous authorship—against which at least the modern moral objection of "forgery" is without weight, though other grave literary difficulties remain.

IV

For the other New Testament books the question of authorship is even more difficult. We do not possess any generally acknowledged writings by their alleged authors, such as we have in the case of

Paul, which we can use as samples of style; nor are their lives and characters known to us so well as his. It may be admitted that the style of the Third Gospel and Acts is that of one and the same man, that the style of the Fourth Gospel is like that of 1 John but different from that of Revelation. But this does not prove whether or not any of these books was written by John the son of Zebedee, or by Luke, whom Paul called the beloved physician. We cannot now say with any certainty just what kind of books these men could or could not have written. The relative uniformity of early tradition on authorship is an unreliable criterion, and we are forced to depend on general considerations of a rather subjective and unsatisfactory character. Little unanimity can come, given such a situation. The conclusions which rest on the best arguments seem to be these: on the one hand, that 2 Peter is a late writing under the assumed name of Simon Peter; on the other hand, that Mark's Gospel was written by a man named Mark, since there is difficulty in believing that unless its authorship were known it would not have been ultimately christened with an Apostle's name. It is very doubtful whether the James, the Jude and "the elder" of the Catholic or General Epistles were Apostles even in the wider sense of that word. More importance attaches to the identity of the Evangelists, it being assumed that the historical accuracy of Acts and John depends on the fact that their authors were eyewitnesses. And it is hard to say exactly how collective judgment is tending, even when several decades are reviewed as one. The assurance that the Apostle John wrote the Fourth Gospel has lost ground even in conservative English scholarship in recent years, while the traditional authorship of Luke and Acts has gained some notable supporters.

Often connected with the authorship of New Testament writings is the question of their date. Could either be settled with certainty, it would sometimes carry the other with it, but unfortunately in many cases the date is as uncertain as the author. The genuine letters of Paul may be dated with some confidence in his period of activity described in Acts: Thessalonians during his first visit to Corinth (Acts xviii), Corinthians in the time represented by his Ephesian ministry (Acts xix), Romans on the eve of his fateful journey to Jerusalem (Acts xx). The letters of his imprisonment have usually been dated during the "two years in his own hired dwelling" at Rome (Acts xxviii. 30)—although if the arguments



By RAPHAEL.

Aue in domine
benedicent te glor
in regni in dicent



recently urged in favour of their Ephesian origin should become accepted, a different date would be necessary. In this way the problem of date leads us on to that of place of origin, while for Galatians, which reveals no details, the most significant question appears to be that of destination. One result of modern archæological study, especially the investigations of Sir William Ramsay in Asia Minor, is the rather convincing hypothesis that "the churches of Galatia" (Galatians i. 2) are to be looked for not in the ethnic Kingdom of Galatia in the north-central part of that country, but further south in the cities of Pisidian Antioch, Iconium, Lystra and Derbe mentioned in Acts. It may be suitable to record at this point another archæological detail connected with the setting of Paul's letters. In 1895 a stone was discovered at Delphi which fixes the proconsulship of Gallio, and with it Paul's visit to Corinth and his letters to Thessalonica, as approximately in the year A.D. 51. This is the nearest to an exact date yet available for any New Testament event or writing, though several generations of research on New Testament chronology have made some advance towards settling questions of sequence, of the limits within which certain events must be dated, and similar problems.

As with Paul's Epistles, so in other writings the associated questions of date and place of writing and of destination have entered into the discussion of authorship. Hebrews is a case in point, for it has become less certain than used to be thought that the readers were Jewish Christians in danger of relapsing to Judaism, that the Temple was still standing when the author wrote about its sacrifices (or rather those of the Tabernacle) in the present tense, or that his words "they of Italy salute you," indicate that Italy was the place in which he wrote. The somewhat metaphysical terms in which the readers of James, 1 Peter, and 2 John are addressed permit no confident inference as to the identity of their recipients. We may suspect that Babylon in 1 Peter v. 13 is also a cryptically formal expression. But neither for these nor the more important books of the canon is much certainty about the origin available. We may believe that Revelation was written, as it says, by a Christian named John, on Patmos, to the churches of the Province of Asia. We may even credit the second century tradition that puts it about A.D. 95, although at once the problem of earlier sources arises.

The Evangelists give us as little information about associated

questions as they do about their own identity. Not only does none of them call himself by name (the superscriptions in the manuscript, "Gospel according to Matthew," etc., are later, the record of second century nomenclature), but scholars have found great difficulty in getting clear evidence of the place or date of writing or of any distinctive clue as to the public for whom they were intended. The synoptic Gospels have been dated just before or after the fall of Jerusalem in A.D. 70, in various unconvincing combinations. And the generation from A.D. 62 to A.D. 96 probably includes them all, as well as Acts, and indeed most of the New Testament in so far as it was not previously written by Paul. But for the place of writing there are left the most unreliable conjectures, and for audience we have only Luke's address to Theophilus, who may be neither an actual patron nor typical of Luke's actual readers. In any case we know nothing about him. The Evangelists' purpose in writing is quite clear, whether definitely expressed by them (Luke i. 4; John xx. 30-31) or not. They wished to confirm faith in Jesus of Nazareth through the record of His miracles, teaching, and fulfilment of prophecy. In spite of Matthew's use of Jewish prophecy, the readers may have been in every case largely of Gentile origin. But in what land of the Mediterranean world these books first saw light and were read we cannot now know for certain. In many respects they are as independent of time and place as they are impersonal and freed from the self-consciousness of authorship. Yet the devout scholar can hardly avoid asking the questions which there is so little hope of his being able to solve.

Another question of literary origin is the problem of sources. This phase of investigation became prominent in New Testament research in the latter half of the nineteenth century. The interest and obvious effectiveness of source-criticism in the Old Testament gave impetus to the application of the same tool to the Christian Scriptures, while the synoptic problem made the question of sources urgent. The curious relation of the three first Gospels, their likenesses and differences, came to be recognized when they were studied comparatively or synoptically, and seemed to demand some explanation. From the time of Frederick Schleiermacher to the present all kinds of solutions have been proposed, and this process of trial and error and the wide and independent investigations of this most fascinating problem have led to a considerable amount of

agreement among competent and unprejudiced scholars. For many years the old view of quite independent and original compositions by three different writers was maintained with the help of a theory of special stereotyped oral tradition, which would explain the striking likeness in parallel passages. This theory has been officially adopted by the Papal Biblical Commission and was held fairly recently by some able Protestant scholars in England.

The necessity for some theory of literary dependence is, however, now more generally recognized. It was demonstrated in English by James Smith of Jordanhill as early as 1853. There are in modern times, though not in antiquity, literary objections to the unacknowledged extensive use or paraphrase by one writer of another writer's work. Nevertheless, this was probably the method of the Evangelists, and so it is customary to explain their likenesses by two hypotheses: Mark was written first and was used as a source by the writers of Matthew and Luke; secondly, the other material common to these two later Gospels was similarly derived by each independently from earlier written material which, following the German abbreviation for source (*Quelle*), scholars call Q.

This twofold theory is repeatedly challenged, but unsuccessfully, and it continues to make a good working theory for Gospel study. Of course it leaves many questions unanswered—for instance, as to the sources of Mark; the sources (other than Mark) of Matthew and Luke; the relation of Mark to Q, and the forms in which Q may have been accessible to the later evangelists. The credit for first demonstrating that Mark is the source, and that Matthew and Luke used it, is usually assigned to C. H. Weisse (1838). This is the most assured element in the hypothesis. By this, source-criticism has been able to reveal not the date, but the sequence of the Gospels so far as Mark's priority is concerned, and also to confirm the impression that at least for a large part of their extent the Gospels of Luke and Matthew are paraphrases of older Greek writings. This further affects the tradition that one of these Gospels was written by Matthew the Apostle and ex-publican. At least, those are influenced thereby who suppose that an eyewitness of Jesus' ministry would not use at second-hand someone else's narrative of His ministry, or who find it difficult to reconcile this Greek book, composed from Greek sources with the early Christian tradition, which affirms that what Matthew wrote was in a Semitic language.

This simple discovery is symptomatic of the growing authority which Biblical criticism is exercising. As Professor F. C. Conybeare wrote in his "History of New Testament Criticism" (1910), "It surely denotes a great change, almost amounting to a revolution, when so ancient and well-attested a tradition as that which assigned the first Gospel to the Apostle Matthew is set aside by leaders of the English clergy."

The question of literary dependence is brought forward again by two pairs of New Testament letters which, like the synoptic Gospels, show striking verbal agreement. The result of investigations gives us every reason to believe that when 2 Peter was written the author had before him a copy of the Epistle of Jude and transferred much of its thought and language to his own papyrus. Those who believe Ephesians to have been written later in Paul's name, and Colossians to be genuine, make a similar explanation that Ephesians borrowed from Colossians, but the remarkable parallelism of these two letters, extending even to the wording of whole phrases, can be explained as due to a common author, whether or not he be the Apostle.

The same key of source-analysis has been applied to other books in the hope of unlocking some of the secrets of their origin. In the absence of verbal parallels the clues in them are even more meagre. It is perfectly natural to suppose that if Luke and Matthew copied Mark, the same method of using sources may have been used in Mark itself, in Acts, which is by the same hand as the Third Gospel, and in the Fourth Gospel, which is admittedly of even later date. The individuality of style which the third and fourth Evangelists both display is no evidence against an assumption of underlying sources, since unlike Semitic compilers (e.g., in the Pentateuch) these writers did not retain verbatim the characteristic wording of each source. Their habit of paraphrase makes the hope of determining sources rather dim. Critics are compelled to rely on differences of viewpoint as a clue for dividing these books between sources. They have often resigned the search for continuous written documents in favour of an effort to discover the sources of oral information or opinion or, at most, written fragments. The Book of Revelation lends itself readily to all such hypotheses because of its episodic form and because it belongs to a type of writing especially open to compilation and to revision. Some of the more modern theories assume that an original homogeneous work has been mis-

handled by a later editor and interpolator. Such is the theory advanced by R. H. Charles on Revelation, Alfred Loisy on Acts, and various critics on the Gospel of John. Another new departure in source-criticism is the theory that our Greek books are translations from the Aramaic.

All these types of theories have their place. In some cases each of them may in turn be true. It is unfortunate that the sources, like the facts of authorship, are now so generally beyond recovery. It might seem that the discussion of both was futile. Were the New Testament a book of no significance that would be true, but even unprovable conjectures have their value in so far as they keep the mind open and alert for new solutions and freed from the control of equally unprovable stereotyped traditions or assumptions. Furthermore, the literary questions are not in themselves the end of New Testament study. They are important if, and in so far as, they contribute to knowledge in the further fields. These fields are the history and the thought which the New Testament records.

The career of Jesus is the beginning of Christian history and has been naturally a subject of great interest and debate. For our knowledge of it we have very little material outside the four Gospels. The historian's problem is to know how to use these records. How far are they reliable, complete, unpartisan? How may they be reconciled with each other? This last difficulty arises especially when the Gospel of John is compared with the synoptic Gospels and when it is necessary either to accept and reconcile both these accounts or to reject one. In the latter case John's is usually considered less historically accurate.

This constitutes one of the major questions of history: for if John's narrative is not accurate, doubt seems also to be cast on his representation of Jesus' thought, not to mention the less significant question of apostolic authorship. And in all the Gospels we have miracles which the scientific mind tends to discredit. The stages in this discussion form an interesting chapter in adventurous heresy.

The "Life" of Jesus by David Frederick Strauss in German (1835) and that of Ernest Renan in French (1863), caused a stir in all Christendom because of their free handling of the Gospel records. It was claimed that many of the miracle stories were

symbol, allegory, myth or legend—which meant simply that they were untrue.

The whole length of denying totally the historical existence of Jesus was reached by the German professor of philosophy, Arthur Drews, the author of "*The Christ Myth*" (1910), and by kindred minds in England and America. But the letters of Paul are too early and too certainly genuine to admit such an hypothesis. The synoptic Gospels contain a largely consistent and probable picture of a flesh and blood figure, a historical person. According to Strauss and many other critics defects are found in their arrangement; their miracle stories may be explained as in part exaggeration and in part unscientific records of faith cures and other real events; the whole Gospel of John may be left to one side—but there still remains Jesus of Nazareth, who "suffered under Pontius Pilate."

It is well that Jesus' historicity itself has been questioned; it is well that details of the Gospel story are met with discriminating judgments. The scholar knows, as the man in the street may not, that the alternatives in historical criticism are not total acceptance or total rejection. Rather he is willing to undergo the shaking of all things, that the things which cannot be shaken may remain. Agreement on details is not to be expected, but that Jesus taught in Galilee like a Jewish rabbi with an informal group of followers, and that He died in Jerusalem like an ancient martyr prophet, may be generally agreed. The duration of His public life and the order of incidents cannot and need not be determined. Recent careful inquiry into the written and oral history of the Gospel material shows how improbable it is that the episodes now recorded have retained original details of sequence or setting, but for a few exceptions. The Palestinian local colour of the synoptic Gospels, the Jewish tone of the words of Jesus, the psychological probability of the stories of the cure of disease—all have been effectively presented by critical scholars and have given assurance of historical reality.

The portrait of Jesus, His inner consciousness, His exact aim, His relation to contemporary standards of thought—these have for a century and a half been the subject of the most various interpretations. A mystery remains about Him; but the increased study of His times and of His Jewish background, the constant and varied rewriting of His life by modern scholars, have given us a sense of His reality as a historical person, satisfying the modern mind as

no merely mystical experience of a present Christ could do. Jesus was no phantasm, but had flesh and bones (Luke xxiv. 39), and the stories about Him, though naturally receiving accretions, as was humanly inevitable, were not cunningly devised myths (2 Peter i. 16).

VI

Even more clearly has come into focus the figure of Paul. Understood not as a scholastic theologian but as a man of his times and setting, a keen thinker, an effective organizer, a self-revealing writer—few men of antiquity are so intimately known to us as Paul. A better knowledge of pagan as well as of Jewish thought has made his thinking and writing more intelligible, while the outward and physical circumstances of his life can now be recovered by geographical and archæological research. The partial story of his career in Acts has been tested wherever archæology could test it, and may be said to have vindicated itself in an extraordinary number of details of place and history. Luke, the writer of Acts, moves with a surety of touch among the cities and governments of the Ægean world. Excavations and inscriptions at Ephesus have made alive the stirring scenes there enacted, and described by the Evangelist in the nineteenth chapter. He tells of the silversmiths' trade union and their dwindling industry in votive miniatures of the famous statue and souvenirs of the shrine; the high officials who in spite of their connexion with the State religion had enough sympathy for Paul to want to keep him out of the riot, the theatre as we can now place it by its ruins and estimate its great capacity; the town clerk who as the principal municipal executive had reason to warn the crowd in the name of law and order.

This vindication of Acts is the more remarkable in that an influential school of German critics in the nineteenth century did much to discredit its accuracy. It was contrasted with Paul's letters, and naturally could not be preferred to autobiographical records of the highest value. Modern study has reduced the discrepancy of the two sources so that it is possible to accept or reconcile both without recourse to the extreme gymnastics of the older harmonists. Undoubted difficulties remain, probably due to some inaccuracies of Acts and to its slightly blurred picture of the Christianity of Paul. But scholars know that it is as unscientific to reject a whole book for

slight errors as it is to accept a whole book because of the proved accuracy of some details. The outline of Paul's work in Acts is not complete, and it drops the curtain before his fate is told; but it is sufficient to explain much of the background of his letters. With a like dovetailing, the letters supplement the narrative, adding, for example, the most instructive episodes of the conflict with Judaizers in Galatia, and the complex and still somewhat obscure series of difficulties at Corinth. Many of the names of those scholars who have brought to light the reality of this stormy career are little known, but all shades of Christian thought are the rich heirs of the historical reconstruction which generations of Pauline research have made possible. Paul lives again as he never lived, even for the reformers who regarded him highly without knowing or perhaps understanding him.

For the rest of New Testament times our narrative material is scanty, and the student gropes with difficulty amid the scattered episodes of the early part of Acts or in the total darkness in which the abrupt close of that volume leaves us for the whole succeeding period. The indirect evidence of other Biblical books is called into use and carries us a little way into the thought and experience of separate, often unknown, individuals or communities. There are hints of heresy in some of them, of persecution in some, of growing orthodoxy and organization in some, but no definite persons or events. This ignorance has tempted scholars to reconstructions—valuable undertakings, although not too systematic or assured.

It is typical of modern times that men desire now to know what Jesus Himself really was and what He really thought, rather than to accept the theological explanations of Paul or Athanasius about Him. Even far outside of orthodox tradition, there is a strong conviction that Jesus' words and example have permanent worth and validity. Hence arises the universal effort to recover from our records the very mind of Christ.

What is most needed for an understanding of Him is to discover what thought He entertained about Himself and what outlook He had on the future. For the early Christians these questions can be answered with certainty. They thought Him the Messiah and they expected an early world catastrophe in which He would play a rôle.

The ethical teaching of Jesus is plain in general outline. In the synoptic Gospels the ethical is the most extensive part of His teaching.

This material has been singularly neglected and abused. Even modern and liberal scholars have hurried to apply it, like casuist rules, to present-day issues, or to overlay it with our own social viewpoint. But in the popular religious life and writings, if not in learned analysis, modern Bible study has tended to lead men to the Gospels and to inquire with confidence for Jesus' advice for ideals of character and principles of conduct. And it is evident that what He had at heart was something as simple as the ways of a little child.

For the thought of the other New Testament books—and indeed for the Gospels too, since they are witnesses to the Christianity of the authors as well as to the life and teachings of Jesus—the genetic method of explanation has come into vogue. This means that early Christianity was not a complete and static religion but a rapid, manifold development, and its various literary remains can find their place only as records of this variation and growth. The classic example of such a formulation was worked out by Ferdinand Baur, a professor at the University of Tübingen, nearly a century ago, on the basis of Hegel's philosophy of history. The key to the New Testament he found in Paul's conflict with the Judaizing Christians. This antithesis was succeeded, he believed, by a synthesis or reconciliation. He assigned the several New Testament writings to one or another of these "tendencies," laying stress on the polemic or the conciliative purposes of the authors, and settling questions of date and authorship to suit this formula. His pioneer application of the principle of development, his realization of the background of New Testament life as one of social movement, historic influences and religious growth, is a permanent contribution, though his solution was too simple and too artificial.

It was once seriously urged that Paul was the real founder of Christianity. But there is less said now than used to be about Paulinism in Mark and Luke and John. Possibly even before Paul, among Hellenists like Stephen and in churches like Antioch, an interpretation of Jesus had begun, which both Paul and other Christians merely carried forward.

It has been urged recently by many scholars, that for Paul and early Christianity the primitive Gospel had been transformed by the "mysteries." These are a series of cults, mostly of Oriental origin, from the old and famous mysteries of Demeter at Eleusis

to the more recent importations of the Egyptian Isis, of the Anatolian and Syrian goddesses, and of the Persian Mithras. It is claimed that the title "Lord" and the rôle of Jesus as a Redeemer-God, the stress on future salvation, and even the sacraments of Christianity are paralleled and presumably influenced by these rival religions. That is an easy way to account for Christian developments which we cannot explain, but a precarious one because of our even greater ignorance of those ancient secret cults. The growing number of persons who accept without first-hand scrutiny this popular explanation are scarcely aware of the meagreness of its foundation.

The Fourth Gospel creates a problem of similar difficulty. It may be acknowledged to be not so much a history as theology in narrative form. But where does the theology come from? The prologue, with its reference to a term prominent in Stoic philosophy and in Alexandrian Judaism, has misled many to suppose that the Hellenistic influence runs throughout. That is not the case. The viewpoint of the book represents a kind of simple mysticism, perhaps native to a Christianity neither Jewish nor Greek in any academic sense. More allegorical and intellectual in its contrasts with the Old Testament is the argument in the Epistle to the Hebrews. In spite of its theological tone it was an intensely practical essay, intended to promote faith. Its language, like that of Luke in Acts, shows a Christian writer really at home with the idiomatic Greek of educated men. Familiarity with the idiom of Greek religion first meets us in passages in the Pastoral Epistles and 2 Peter. For James and 1 Peter the religious atmosphere is more difficult to define. The former is akin to quite simple hortatory ethics, both pagan and Jewish; the latter is largely occupied with the single problem of persecution, but betrays the strongest likeness of any New Testament writer to the letters of Paul.

No book of the New Testament has gained from recent study more in understanding than the Apocalypse or Revelation of John. Modern study has discovered the apocalyptic technique by a better acquaintance with the related literature. The keys to its riddles are historical and literary, and many of them have been found, though perhaps no master-key. The futuristic interpretation can now be rejected. The "beast" is no Pope, Napoleon or Kaiser, but a Roman emperor of the first century. The plagues are

symbolical and suggestive rather than literal, and so, of course, is the New Jerusalem. In these matters the author is using traditional imagery from the Old Testament and perhaps from uncanonical sources. He may even have embodied earlier written material in blocks. His theme is obvious enough—a protest against interference with his religion and confidence that God will punish the wicked and unbelieving persecutors. Of other elements of Christianity—spiritual, doctrinal, ethical—the reader will look in vain for elaboration and must be satisfied with hints.

Though the assured result of modern study is the discovery of a striking diversity of viewpoint among the contributors to the New Testament, yet there is a degree of unity binding all books of the New Testament together. This is what we should expect of the nascent Church—a miscellaneous group in a plastic period, at the focal point of several cultural and religious influences. This diversity may be assigned not to human fault but to divine providence.

“For God fulfils Himself in many ways,
Lest one good custom should corrupt the world.”

It establishes the New Testament not as a standard of narrow Christian orthodoxy, but as a charter of liberty, a justifier of differences.

VII

The positive conclusions of New Testament research may seem disappointing to some. It may well be that our generation can claim no higher achievement than many in the past—the collecting of materials for our successors' use and the testing of wrong roads that they may avoid them. Those who expect quick and certain answers will promptly call the higher criticism bankrupt, but those who are familiar with the difficulties in other fields of human learning—the physical, social and historical sciences—will see a demand for suspended judgment, for confession of ignorance, and for the patient laying of siege to uncaptured positions by continual recourse to every slightest detail. One cannot look forward to rapid strides in the near future. In many cases the material is so limited and so non-committal that one may well despair of perfect knowledge. Of the authorship of Hebrews, Origen said long ago, “God only knows.” Such agnosticism is certainly as

befitting as the blind acceptance of primitive conjecture or mediæval dogmas, or as fascination with the latest clever hypothesis.

But the results are not merely indecisive. A vast amount of detailed information bearing on the New Testament has been collected, illustrating every passage and problem. Various important questions have been settled. The answers are sometimes new, sometimes old. Sometimes they are already accepted by all, sometimes the acceptance lags but is ultimately certain. Many scholars are prepared to agree on the relative probability of differing solutions, and high probability is often the most that anyone ought to assert of what we are inclined to call fact or proof.

If the progress of the study has not often been spectacular it has been the more steady and more sure. When so many countries and scholars are interested in a problem its solution can only commend itself after an interval of independent testing; when the problem is so complex new light on the whole is only gained by the cumulative effect of minor discoveries or suggestions. The obscure and often repeated labours of individual investigators have almost imperceptibly produced new convictions and new attitudes. If they have created also new problems it must not be overlooked how many old problems have sunk unregarded into the background. Those venerable perplexities have not always been settled, but a quite changed attitude has made them appear of less moment. When the New Testament was looked upon as, or both Testaments were regarded as, a literal and homogeneous code of dogma or ethics, apparent contradictions of standard or inconsistencies of viewpoint could not be admitted. But with the modern conceptions of unity in diversity, of progressive revelation of development in doctrine, the efforts of the ancient harmonists seem to us unnecessary and fruitless. Even the apparent contradictions between narratives, which in past ages elicited the ingenuity of the devout and the ridicule of the sceptical, do not affect us now in either direction. We perceive the discrepancies and cannot reconcile them; but by aid of elementary knowledge of literary and historical criticism we can understand how they arise and are willing to let them rest.

Concentration on problems in themselves frequently controversial, technical or purely historical, has engendered an entirely new understanding of the Bible and a new attitude towards it. It is surely gain

that the Scriptures are studied in the light of their times, that the human element has become so clear—if only that we may discount it—and that we often think our way into the pulsing heart of the early Church and its leaders. Those who acknowledge the divine, as revealed in the human, will not value it less if the lives of Jesus and His followers are being made more accurately known in their historical reality. Experience shows that the newer discoveries and resultant attitudes of New Testament research do not merely bring heart-burnings and the severe testing of religious faith. They also give direct release to the inherent moral and spiritual power which that antique document still freshly conveys to the new needs of a new day.

The labour of scholars has been done by comparatively few, in the seclusion of the study, by the dim light of the lamp, over dusty books. Many have suffered persecution and abuse even to this present hour. Few have become famous, and fewer still have lived to receive the praise which posterity can recognize as their due. If their influence had remained circumscribed, their labours, no matter how successful or self-denying, could scarcely merit so much discussion. But their efforts have helped to transform our world. Their findings have been preached from the pulpit and popularized through the printing press. The methodical study of the New Testament has secured at last an important place in the education of the ministers in every Christian land and Church where an intelligent ministry is honoured. In religious education and even in secular education the historical study of the New Testament has an ever-widening place. Thus to the critics has been fulfilled the prophecy, "Whatsoever ye have said in the darkness shall be heard in the light; and what ye have spoken in the ear in the inner chambers shall be proclaimed upon the house-tops."

CHAPTER XXIII

THE COMPARATIVE STUDY OF RELIGION

BY PROF. EDMUND D. SOPER, D.D.

It is not so long ago that men were accustomed to think of their own religion as true and of all other religions as false. Such an uncompromising attitude is no longer tenable, for it is now generally recognized that every religion contains some good elements. And yet even the most sympathetic study of other religions proves not to detract from the uniqueness of Christianity; in the supreme personality of Jesus all essentials are completely embodied.

TWO reasons were given by Edward Caird about thirty-five years ago for the modern interest in the study of religion. The first was the idea of the unity of mankind, which had taken possession of the minds of thinking men during the preceding hundred years. But this was not sufficient. In addition, the thought that this unity was "manifesting itself in an organic process of development" had to be appreciated before the possibility of scientific study became apparent.

We must go back to the German philosophers of the late eighteenth and early nineteenth centuries to realize how deeply the conviction of development had penetrated the thinking of the Western world. Hegel worked out his whole philosophy of religion on this principle. Otto Pflieger says of him: "Hegel taught us to regard the religious relation as a process within the mind, developing itself from lower to higher stages and forms according to immanent laws, laws which are essentially the same in the macrocosm of humanity as in the microcosm of the individual. He thus provided the key for the understanding of the history of religion. The different religions appear on this showing not as the works of chance, or arbitrary invention or irrational error. . . . They are rather the various stages in the process of the development of the religious mind." In his great work on the "Philosophy of Religion," Hegel develops his thought in great detail. To him religion is the "Divine

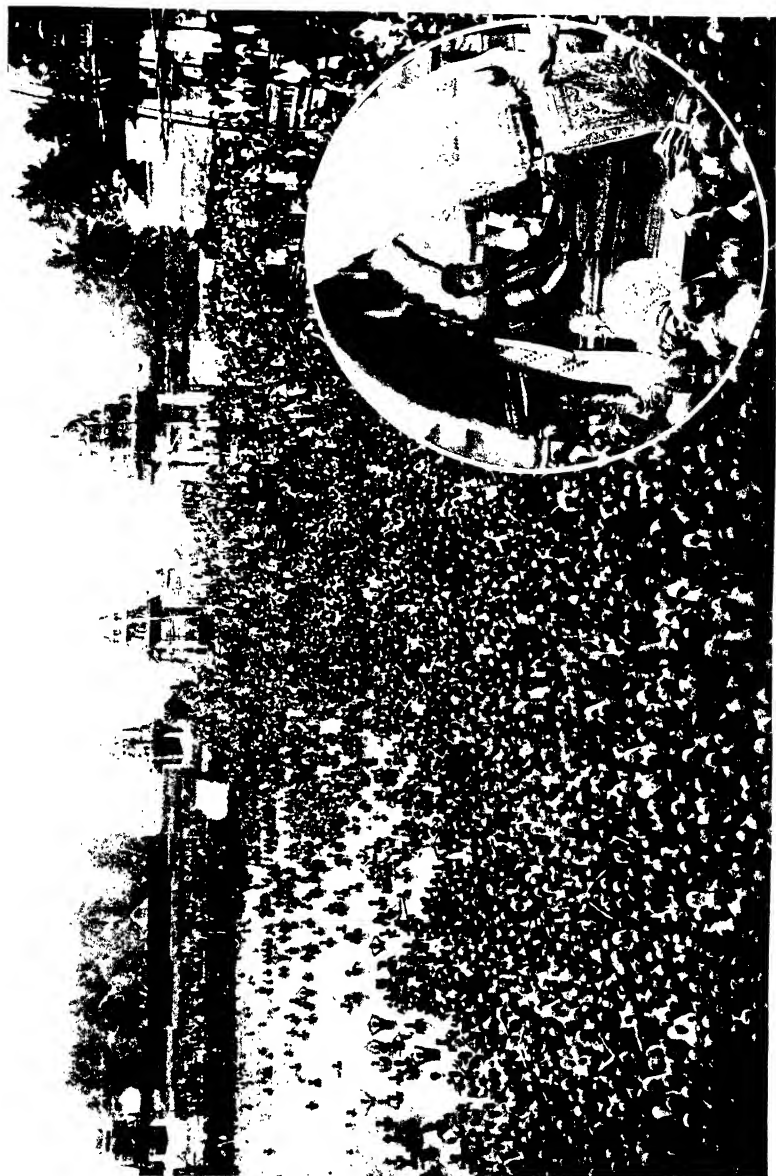
Spirit's knowledge of itself through the mediation of finite spirit." This is not the place to discuss this definition of religion, with its monistic emphasis, but attention is called to it because, with the definition constantly in mind, Hegel makes an extended survey of the religions of the world, placing each in its niche in the vast developmental process which he sees going on in the majestic forward sweep of human history.

Hegel made use of all the facts concerning the religions which were available in his day—to be sure the stock was not large. But as one goes over his pages he is struck by the disproportionate emphasis placed on the scheme into which the facts of religion are made to fit. It becomes quite evident that he had worked out an elaborate formula of human development, with the facts more or less obliged to accommodate themselves to that formula. There was a long distance to travel before the study of religion had reached the stage when facts came first and determined any theories which were built up around them.

Hegel was not the only one of these philosophers who made a contribution to the study of the religions of the world. Even before his time Lessing had come to look on the idea of development "as the proper key to a living apprehension not only of the life of nature, but also of the life of mind." When this thought had been worked out in his mind he came to the further conclusion that the history of religion was the history of the "Education of the Human Race"—as ran the title of one of his works. There was also Frederick von Schelling, who held that there was no possibility of a complete philosophy of religion unless religion were studied genetically, which means that it should be traced historically from its earliest appearance and through its various manifestations in the religions of the world. He thus looked upon religion as "a revelation of God to man which actually develops itself in history." There is, moreover, one who made an even more valuable contribution to the scientific study of the religions, namely Johann Gottfried von Herder, the Prussian divine, philosopher, poet, critic, who has been called "the real founder of the historical school." The importance of the principle he enunciated cannot be over-estimated. It is the foundation on which all study of the religious life of the world must be based if it is really to explain the meaning and significance of religion. He conveys just this: that the

study of religion must be based on facts, all the facts which can be discovered, and among these facts are those which lie far back in the remote ages through which the religions have developed; a religion is what we find it to be because of its origin and the long development through which it has passed; the task of historical study is to unearth all these facts and set each religion before us, not only as it is at the present but as it has developed through the centuries. Accepted as axiomatic to-day, time was when these ideas were not recognized and when such study as was given to the religions of the world was vitiated by unscientific dogmatism, unrestrained by the results of careful historical investigation.

One of the best illustrations we have of this unscientific study is the work of the English deists about the middle of the eighteenth century. They belonged to the movement of thought which during that century turned in violent reaction against the dogmatic and intolerant Christian theology of the day. These men held that God had made an original revelation to man when He created him. It consisted in a series of very definite propositions, or five "truly Catholic truths," as Herbert of Cherbury called them: that one believe in God; that man's duty is to worship Him; that His worship consists mainly in virtue and piety; that man should repent and mend his ways; and that there are rewards and punishments in the world beyond. This original religion was pure and undefiled. If it had not been corrupted man would have advanced out of his state of early innocence naturally and with no perversions. But—and here is one of the strangest dogmatic assertions which can be imagined—this pure religion was defiled by a class of men called "priests" who, seeing the opportunity to work on man's credulity and superstitious fears, invented all kinds of beliefs and ceremonies by which they secured a kind of strangle-hold on the lives of men and obscured the true meaning of religion in the process. To-day all one needs to do is to state what these deists thought about religion and its development to show its absurdity. But in the period before students had begun to think historically it was possible to make such dogmatic statements and to have them received as law and gospel. The facts which show these assertions to be unfounded, though clear enough to us, were not then known. All honour, then, to the philosophers who began to insist on testing all statements by scientifically ascertained facts.



佛陀彌所無南

陸彌陀佛真金色

相好光明無等倫

白毫宛轉五須彌

盤司澄清四大

光中化佛無雙像

化菩薩衆亦無

四十人聯袂衆生

九品咸令登彼岸

第一點是明珠退魔軍之猛將

照地獄門前作救世



命終時來接引

品池畔體金仙

師說
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世壽八十餘娘父月壽三世

Fig. 3

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10

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普陀山給



When we realize all that had been done for well-nigh a century, and that such important principles as have been mentioned were in control of the minds of students, it is a little difficult to understand why the scientific study of religion was looked upon as so new and as needing defence when in 1870 Professor Max Müller, of Oxford University, delivered his lectures on "The Science of Religion." Yet almost at the very beginning of the series he said: "I know that I shall have to meet determined antagonists who will deny the possibility of a scientific treatment of religions as they denied the possibility of a scientific treatment of languages." Why, with all that had been done before, was it so late in securing a firm foundation for itself among students? Max Müller's explanation is that the comparative study of religion could not be undertaken until the materials on which any such study must be based were available. When we go over the references to other religions in the works of the philosophic writers we see quite clear that philosophy is their primary interest and not the various religions. The religions furnish illustrative material for the positions which the philosophers maintain. The study of religion could never come to its own so long as it was to be subordinated to any system which used the facts of religion to back up its own dogmas and, that being accomplished, was satisfied. Religions must be studied as worthy of investigation in their own right, as having a lesson to teach which we must learn without being trammelled by preconceived theories.

This stage had been reached about the time Max Müller delivered his lectures in 1870. Yet he is at pains to defend and explain the new science as in great need of his support. People ask, "What is gained by comparison?" and his answer is, "Why, all higher knowledge is gained by comparison and rests on comparison." Goethe had said long before, "He who knows one language knows none." Max Müller turns this to his own use and declares that the man who knows but one religion knows none. But everything must be based on the careful study of the great stores of information which even in his day were beginning to be provided by scholars working in many fields. And in this connexion he says somewhat naïvely, yet truly, "I believe that philosophers who speculate on the origin of religion and on the psychological conditions of faith will in the future write more circumspectly, and with less of that dogmatic assurance which has hitherto distinguished so many

speculations on the philosophy of religion, not excepting those of Schelling and Hegel."

The comparative study of religion has long since completely won its way as a discipline necessary to the understanding of the religious phenomena of the world's life. One of the chief characteristics of the past three or four decades has been the work of a host of special investigators, each working in his own more or less restricted field. As a result of their labours a great mass of authoritative material is available, so great a mass that no student can hope to do more than attempt to master fully a very small part in addition to securing a general survey of the whole field.

In the days before Christianity the religion of a people was taken for granted both by themselves and by others. No questions were asked, simply because none suggested itself. One people differed from other peoples in many respects—why should not their religions be different? This was the general attitude in antiquity. Only a few travellers and writers of inquiring mind thought enough about what others believed and practised to make a study of it and write down the results of their investigations. The situation was not very different when Christianity began to assume an important place among the religions of the Roman Empire. This was the true religion revealed by God; all others were the invention of the devil or clever imitations which were the more likely to deceive men and lead them astray. It was an attitude of almost unrelieved intolerance.

This continued down through the Middle Ages and well on beyond the period of the Reformation. We must be careful not to overdo the condemnation we feel. Mohammedanism had put Christianity on the defensive with its back against the wall. We cannot wonder that the attitude was one of fear and intolerant disdain. In 1542 Martin Luther published a refutation of the Koran. One of the chapters in this book had this as its title, "That the Koran of Mohammed is Brutish and Hoggish," and another, "About the Coarse Lies in the Koran." Mohammed is described as the "Devil's Worshipper." One of Luther's hymns begins:

"Lord, shield us with Thy word and hope,
And smite the Moslem and the Pope."

The reaction against this intolerant attitude came about the middle of the eighteenth century in the wave of scepticism that swept over Britain, France, and Germany. As Morris Jastrow put it, "Scepticism is the corollary of fanaticism." Though it took different forms in the three countries the movement was really one, a reaction against dogmatism and intolerance in religious circles. It took the form of hostility to all religion, reaching its culmination, perhaps, in Voltaire. But from the standpoint of scientific study it was as much a failure as the religious attitude it so roundly condemned. The fact is, scepticism is as effective a bar to the understanding of religion as is bigotry. It is refreshing to realize that in the very midst of the narrowness of the eighteenth century John Wesley, an ardent Evangelical, should have declared that he could not agree that all those who had never heard of the historical Christ were forever lost. The German philosophers did much to set thinking on the right track and, following them, much good work began to be done in studying the non-Christian religions. But the general attitude was such that Thomas Carlyle felt it necessary in his lectures "On Heroes and Hero-Worship" to take Mohammed as his example of the Hero as Prophet. He wanted to give the underdog a chance; Mohammed had been so unfairly and brutally handled that he felt it was time to say a word in his behalf.

But the tide turned. Max Müller became an early and conspicuous example of a very different attitude. "By unduly depreciating all other religions we have placed our own in a position its Founder never intended for it; we have torn it away from the sacred context of the history of the world; we have ignored, or wilfully narrowed, the sundry times and divers manners in which, in times past, God spake unto the Fathers by the prophets; and instead of recognizing Christianity as coming in the fullness of time, and as the fulfilment of the hopes and desires of the world, we have brought ourselves to look upon its advent as the only broken link in that unbroken chain which is rightly called the Divine government of the world."

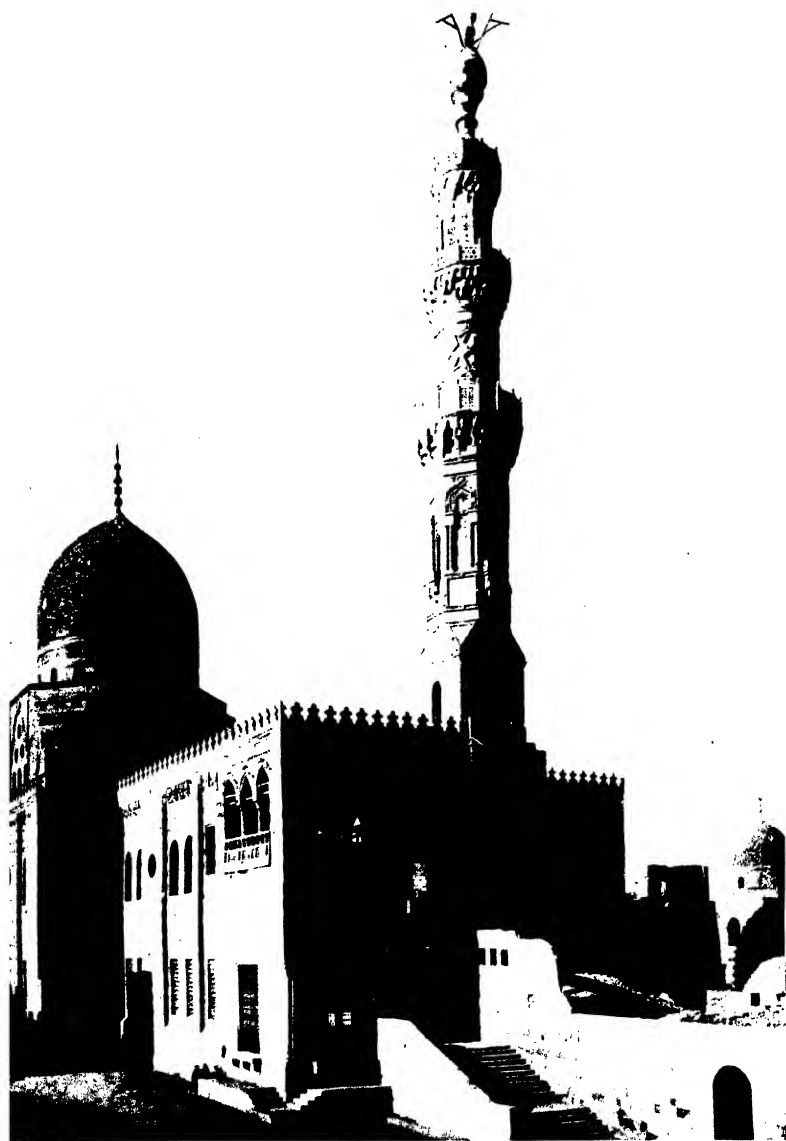
Twenty-five years after this, Professor C. P. Tiele, in opening his Gifford Lectures, says that a scientific student of religion "knows nothing of heretics, schismatics, or heathens; to him, as a man of science, all religious forms are simply objects of investigation, different languages in which the religious spirit expresses itself, means

which enable him to penetrate to a knowledge of religion itself, supreme above all." Yet he was able as a devout Christian to say: "It is an error to suppose that one cannot take up such an impartial scientific position without being a skeptic; that one is disqualified for an impartial investigation if one possesses fixed and earnest religious convictions of one's own. . . . I, at least, do not love the religious community to which I belong the less because I strive to appreciate, by the light of our science, what is truly religious in other forms."

If intolerance is an impassable barrier to a true understanding of other religions, so is scepticism; but of the two there is more hope in the former. An intolerant man may yet have real religion, real though seriously cramped and blinded, while the sceptic in the very nature of the case has none. Religion is not one of those things which can be studied entirely objectively. The man himself must get into it to understand it. Religion is primarily subjective, an experience of the individual soul, which, to be sure, a man has as a member of society and which he shares with others. It is not an intellectual thing like chemistry but an intimate personal thing like friendship. To know it one must do more than read about it or discuss it in conversation. The only avenue of approach which will yield a fruitful understanding is that of personal appropriation through vital contact with spiritual reality, which we speak of as religious experience. From this the sceptic is excluded by his own fundamental attitude. However acute he may be and however learned, he fails at the crucial point through being unable to enter into the kind of understanding which discloses the reality of the meaning of religion as it is.

Let us admit that every one has his bias in approaching so personal a matter as religion. This is just as true of the anti-Christian unbeliever as it is of the devoted Christian. And of all men the one most likely to be warped in his judgment is the man who lives in a fool's paradise and believes he can be neutral. There is no such thing as neutrality where religion is concerned. But when a man realizes the danger of bias in his estimate of the religion of other peoples, what is he to do? There is a simple rule, difficult to apply with consistency but adequate, which is guiding the thinking of an increasing number of students of religion. It is this: take the attitude toward the religions of others which you would want them to take





toward yours under similar circumstances. It is a very old rule, merely adapted to the case in point. This means that just as we should desire the best features of Christianity to be made the basis of judgment of our religion, so we ought to make sure that the best they have should be the basis of the judgment we form of other religions. We are bound to allow our sacred Scriptures and our most precious doctrines to be submitted to the same rigid scrutiny to that to which we are constantly subjecting the sacred books and teachings of the other religions. It is an easy thing to put up "men of straw" and take great pleasure in knocking them down, but the disconcerting thing is that the religions which we have demolished so easily are not, in fact, going down in that fashion. They are showing signs of life, of new life in a number of cases—which is very different from the dying state in which they are thought to be according to the "man of straw" philosophy. The most essential factor in studying a religion is to discover what gives it vitality and lasting strength down through the years. By persisting in thus applying the supreme principle of Jesus in our study of religion we may achieve fair-mindedness and be known as men of candour by all who follow us in our work.

II

But what becomes of the estimate in which Christianity is to be held when its own attitude to other faiths has been changed so radically? Is its uniqueness gone, never to return? Or are we to see our religion in a new light, with nothing lost by the fair-minded approach which is now everywhere the rule in the comparative study of the religions of the world?

To many the uniqueness of Christianity vanishes when all the factors which go to make up the religions of the world are laid down side by side, and when they find the similarity so remarkable that such differences as are observable pale into insignificance as contrasted with the striking likenesses. To these writers religions are one and the same, with only minor differences which do not affect the validity of the fundamental conclusion. Especially is this true of the religions which have a literature and which can look back on a history through many centuries. One religion may be superior to another at this point and at that, but this difference is not sufficient to justify any assertion of intrinsic superiority. It certainly would

not justify missionary propaganda, which always implies a sense of the uniqueness of one's own religion and of shortcomings on the part of those outside the bounds of that faith.

Christianity feels no disappointment when it discovers that all the doctrines it has taught are to be found in embryo or at some further stage in other religions, even in those far removed from itself in history and spirit. But when every statement has been made in candour and honesty, Christianity places a limit beyond which it cannot go. A true Christian must realize that there is a line of demarcation between his religion and all others. No two men might state it in just the same words, but the difference exists, very real and very significant. Is it ethical insight? Is it the possession of a dynamic which makes possible moral achievement? Is it the peace beyond understanding which flows over a man's soul when he realizes that he has been restored to fellowship with God through the word of forgiveness? Is it the clear and unclouded vision of God as Father which takes possession of all his thinking? Is it the sense of brotherhood transcending national and racial bounds which makes all life take on new meaning? It may be some of these, or all these and other elements besides, but there is one feature which marks Christianity off from other religions more effectively than all else. It is the embodiment of everything Christianity means and stands for in a supreme personality, Jesus Christ, the unique revelation of God as Father. There is a certain inevitability about Him which makes Him in a very real sense the centre of the world's religious life. As He is unique, so is Christianity unique. The growing tendency of the comparative study of religions is to emphasize this uniqueness and raise Him to ever higher summits in the estimation of candid men both within and without the bounds of Christianity.

III

Religion began in very simple crude beginnings and developed slowly into more satisfying and complete forms. We see the process going on at the present time, religions in almost all stages of development, gradually changing and assuming new forms under our very eyes. Can anyone doubt that this has been as true of the past as of the present? A very slight acquaintance with the history of religion will convince one that we do not live in a static universe religiously

any more than we do socially or morally. Changes are taking place as they have taken place, so far as we know, from the time of the very origins of religion itself. And the result of such study in the minds of the vast majority of students to-day is that religion began, not in a primitive monotheism but in something very different, probably in the attitude which savage man in the very beginning of human development took toward nature about him, conceived as something alive like himself. From such a very crude and simple beginning all the religions of the world have developed. But some one objects, calling attention to the Biblical narrative of the beginning of things in the Book of Genesis. When we study carefully the early chapters of Genesis we begin to realize that the religion which emerges into definite form is a religion already well developed. An altar and various kinds of sacrifice are taken for granted in the story of Cain and Abel, and presupposes a quite considerable process of development. A historical study of the religion of the Old Testament will make clear that not until the time of the writing prophets, Amos, Isaiah and others, do we have indubitable monotheism. This is not the place to attempt a detailed account of this development, which can be found in any recent volume which deals with Old Testament religion, but we merely call attention to a conclusion which cannot be gainsaid without doing violence to so many facts that a candid student is compelled to accept it as assured. The meaning of which is that all religions, not excepting that whose history is given in the Christian Scriptures, have come up through a long process of development and can only be understood by a study of this evolution.

There is a key to an understanding of this process which should be firmly grasped. Religion is but one phase, albeit a most important phase, of human development. It is a part of the civilization of a people and changes with their development. When men are found in a savage state they have a religion to match—crude, fearsome, and inchoate. When they have emerged into civilized life, into small city states with a history and organized life, including the division of labour and a broader outlook on life generally, their religion is no longer that of savages, but one better fitted to their mental and moral development. Let it not be thought that the line of demarcation is definite and clear-cut; it is just the opposite. But the significant thing is that no savage tribe has ever developed a religion

which has been anything but crude, and that every civilized people has outgrown its former simple religion and now possesses a belief and a practice matching the stage it has reached in other departments of its life. When we would explain, then, the development of religion we must always relate it to the culture of which it is a part. One step further may be taken, and that is to realize that religion, just as culture, grows as new needs arise and demand fulfilment. This can be traced out in more or less detail in all the great religions whose rise out of more primitive beginnings can be followed with any accuracy.

The acceptance of such a principle does not rid us of difficulties. In fact it introduces one or two which otherwise might not have arisen, but which must be faced frankly. We are told in Genesis that God created man in His own image; we are told by many historians that man created God in his own image. Both declarations are, in fact, true, but the former is the more important and higher truth, the final fact with which we have to do. As far back as the beginning of the fifth century before Christ, Xenophanes the Greek philosopher said that the Ethiopians imagined that the gods had flat noses and swarthy skins, while the Thracians gave them blue eyes and red hair, and that if cattle and horses had hands they, too, would make gods like themselves. According to the principle of analogy men must picture gods like themselves, only bigger and more powerful and wiser. Even in the Bible this anthropomorphism is found in full bloom. "The eternal God is thy refuge, and underneath are the everlasting arms." Has God arms? Jesus called God, Father. In what sense is He a Father? The Mohammedans will have none of it, for fatherhood means to them physical procreation, which they hold is unworthy of the Lord of the universe. It would seem, then, that in the long process by which the religions of the world have become what they are men have been continually raising their gods to a higher and higher plane in harmony with the loftier conceptions induced by their own individual and social development. They have outgrown the ideal which satisfied them a few centuries earlier; they proceed, almost if not quite unconsciously, to expand their thought of God in correspondence with their growing moral and social ideas.

What conclusion is to be drawn from considerations such as these? There are those who would frankly throw overboard any

idea of a divine revelation and even a divine Being. Religion, they assert, is one of the products of man's evolution, and there is nothing supernatural or divine about it. All that seems divine is what man has constructed out of his own imaginings and longings and gratuitously projected into the sky. There is no objective reality out there; he worships what he himself has made. He is deceiving himself when he thinks he is praying to a real God, for the whole structure of religion he has built up for himself, and the Being whom he postulates as the source of life and strength has no real existence. This view is held by some, like Émile Durkheim, the French sociologist, who believe that religion will continue to persist because it answers to genuine and inalienable human needs. But others feel that religion is a passing phase of human experience and that, when men become sufficiently intelligent to see things as they really are, they will realize that there is no God except of their own manufacture, and hence religion must be left behind as a survival of a time of crudity and ignorance. But there is another conclusion quite as reasonable and far more satisfying. That would seem to be an irrational universe in which the thinking which is rooted in man's elemental emotions and his deepest needs proved to be wholly a mistake. For such a mistake is of a very different kind from those which have to do with explanations of the course of nature, matters upon which we are now being set right by the discoveries of science. Such a mistake would be similar to that involved in the assertion that hate was better than love, or that dishonesty was on a higher level than honesty. We would have nowhere to stand; it would be an inexplicable universe. So if all men's outreachings after reality beyond the natural order were a snare and a delusion, human life itself would become dislocated and unreal and cheap. Yes, men have made God in their own image—but how and why? Only because God made them first in His own image and thus made it possible for them gradually to see the meaning of their own lives and their relation to the great source of all. God did not force Himself upon men, but He has always been seeking to make Himself known and give Himself to men as they were able to appreciate and assimilate Him. There is, in other words, a divine pedagogy, God coming into men's minds and lives in the only way in which that revelation could be understood and appreciated. He has revealed Himself "in divers times and divers manners" in the

history of the human race; and in the history of the religions we are able to trace that process of divine disclosure or revelation through the ages, until finally God revealed Himself in His fullness in Jesus Christ.

IV

With the mention of Jesus Christ it might be said that we have come to the end of the process, that He is the final limit of the evolution of religion, beyond which it is impossible to go. But there is a persistent caveat warning us that we must face unflinchingly a problem which the doctrine of evolution forces upon us. What right have we to say that in Christianity religion has reached finality, that it cannot be expected to develop into something else more fitted to meet the needs of men in the coming centuries? It may be the highest and most satisfying form religion has yet reached. But will it continue to satisfy when in the process of evolution men have developed into a life and culture which shall mark a distinct step ahead of the point which the race has now reached? To say that we are at the farthest limit of advancement is indeed too bold for anyone who appreciates how far humanity is from an ideal state. We must face the question: will Christianity continue to be the religion of men as they reach out into the great unexplored ages stretching out far into the future? It is true no one has successfully set forth what this religion is to be, but this is not necessary. The idea of progress almost inevitably suggests that we are to attain heights whose scenery it is far beyond the mind of any man now living to picture or appreciate. What may we not expect in religious development as the centuries unroll? Who dare say that Christianity has in it the elements of finality when we do not know what possibilities are bound up in the future?

When we face such a problem as this it is well to examine with great care the categories and concepts with which we are dealing. The doctrine of evolution is not difficult to state, but some things which seem simple have wrapped up in them rather surprising factors. Thus with reference to evolution, it seems obvious that the process is continuous and will keep on in the future indefinitely. In a sense this is so, but thoughtful students are finding limits even in an evolutionary process, limits inherent in the very conditions according to which the development takes place. We may well

listen to one of these scientists. Professor E. G. Conklin makes these significant statements:

"Biological progress, however, always has its limits; sooner or later differentiation reaches a stage beyond which it cannot go without destroying the internal balance, or integration, and the adaptability to external conditions. . . . It is, of course, conceivable that differentiation might go on indefinitely in any line; the elephant might get a larger trunk, the giraffe a longer neck, and man a larger and larger brain; but while such things are conceivable they are not practicable for the reasons named. In any line of evolution progress is most rapid at first, and then it gradually slows down until it stops, and in every well-tried path of evolution progress has practically come to an end. . . . There have been three main lines of human evolution—physical, intellectual, social—and it is generally assumed that in each of these lines we may look forward to endless progress. The infinite perfectibility of man is a fundamental article of faith with many people, and yet all biological evidence indicates that it is not supported by fact. Not only the history of other organisms but also that of man himself indicates that progress in any particular line is limited."

Professor Conklin also holds that so far as intellectual capacities are concerned we are in no wise ahead of the Greeks. "There are better opportunities to-day than ever before for the development of the individual, but the intellectual evolution of the race, no less than the physical, has slowed down until it has practically stopped." In view of words such as these, which might be duplicated in essential meaning from Professor J. Arthur Thomson, it would be a very tough-minded dogmatist who without reserve would give himself to any theory which would make the elimination of Christianity an inevitable or even probable prospect.

Many students of comparative religion are face to face with this question and look on it as the most significant of all. One thing is very evident, that increasingly Christianity is being looked upon as the highest point reached in the development of religion up to the present time. Is it possible to go any further? But why should anyone want to do so? Should we not be satisfied that Christianity is the high-water mark of religion and then let the distant future take care of itself? Strange as it may seem, it does not satisfy those for whom the question has assumed a vital

significance. The suspicion is bound to come stealing in on one's thinking that if Christianity cannot claim finality there must be something about it now which is inadequate and imperfect, something we may not have discovered but which on that account is the more disconcerting. A man who is truly in love is not likely to feel that if only he might meet still other charming women he might find one more to his liking. Such stultifying fears would cast a shadow over the happiest experience. There is something almost in the nature of the absolute about our human affections. It is not a complete analogy, of course, but it may help us to realize the enervating effect of such thoughts on our estimate of Christianity.

What, then, are we to do? Its difficulty is real. We cannot settle it on the plane of historical science. As Ernest Troeltsch has put it, "Just because Christianity is thus an historical phenomenon, it is not possible to bring forward any theoretical proof that it must remain the highest religion for ever, with no possibility of its being surpassed." This could not be stated more plainly. But we may secure relief from the evolutionists themselves. We have found that evolution has its limits, beyond which no further development is possible or can be expected. This was true among the Greeks in art and architecture, and no one has ever been able to improve upon the monuments of their genius. And we may say just as truly that the development in character has reached a limit in Jesus. No one has gone beyond Him, not even in imagination. There is no more prospect of doing so to-day than at any time since He lived and taught in Galilee. But still the hard-headed objector may persist that this is no proof, that we are simply allowing our hopes and inclinations and intuitions to take the place of scientific demonstration. Suppose we grant it, what then? All we are doing is to go with pure science as far as science can travel and then, when it can accompany us no farther, to depend upon finer instruments than science can furnish. For science cannot plumb the deepest reaches of human life. Another element must enter in—a factor which does not contradict science but goes beyond it—religious intuition, the assurance of faith, the confidence which comes with the clear view above the clouds, above the distractions of the lower air. We then see, rising above all the imperfect and transitory manifestations of religion, rising above Christianity itself, the figure of Jesus Christ, the same yesterday and to-day and forever.



JACOB BOELKE



CHAPTER XXIV

MYSTICISM AND THE INNER LIFE

BY PROF. RUFUS M. JONES, LL.D., D.D.

There is a realm beyond and above all controversies and conflicts. It is the inner life of the soul in its direct dependence on God. In the courage gained from this vision men may go forward bravely to deal with the practical issues of daily living.

CHRISTIANITY has been marked by immense complexity and variety of forms. It has again and again been remoulded and reshaped by the genius and the aptitudes of the different peoples who have adopted it and lived by it. It has modified and in turn been modified by the institutions through which it has been expressed. It has been a creative power in art, literature, philosophy and science, and conversely these great vital streams of thought have profoundly affected the course of the central current itself. Among the many varieties of Christianity, that type covered by the word Mysticism is one of the most interesting and at the same time one of the most important.

Mysticism may be regarded as a form of religion that is primarily grounded in experience. It claims to have an awareness of its object, an acquaintance with it, and not merely discursive knowledge about it. It is no more a specifically emotional approach to reality than is appreciation of beauty, or than is any one of our great human values. It is felt to be a distinct way of corresponding with spiritual reality, kindred to our own inner nature, only vastly transcending it—a more of consciousness, so to speak, continuous with our own. It runs, through an ascending scale of intensity—from a quiet, normal consciousness which environs us with an invisible spiritual universe, which refreshes, vitalizes, and heals us from within—up to exalted states of ecstasy which many of the great mystics of

history have experienced. But ecstasy is not an essential mark of mysticism; it is rather a rare and highly accentuated stage of the experience, occurring only to persons who possess peculiar psychical constitutions. We have, therefore, in mystical experience at its best an experience thoroughly healthy, sound, and normal, as demonstrative of its worth to the subject of it as the experience of beauty or of love, and also capable of being verified and tested in terms of its power to construct and integrate the moral and spiritual life of the individual.

Mysticism has often been a protest of the soul against externality, system, habit, organization, rigidity, creedal formulation. In some periods the mystic has shown the genius of an originator, of a spiritual prophet, with a mission to find new paths of life and thought. He has brought freshness, insight, creative leadership. At other times, in the power of personal discovery, he has cried against ecclesiasticism, against ritual, against form, against legalism in all its recurring variations. But the "protest" is not primary; it is secondary. The primary thing is always the thrilling discovery of God; the awakening of soul from lethargy and slumber to an acuter stage of *seeing*; the consciousness of a living Presence taking the place of a theory of a speculation or a hypothesis.

In our own time the pressure of science and criticism has been an important contributory factor in producing a new outburst of mystical experience and in arousing a fresh interest in this inner way to God. The great leaders of scientific and critical thought have, as is always the case, been remarkable for reverence and humility, and they have, too, been highly gifted with creative imagination, that is, with the power of seeing, the faculty of vision. But in spite of this there have been many lesser scientists and critical scholars who have fostered a rigid materialistic and mechanistic theory of the universe. There has been in progress for many years a powerful drift toward a naked "naturalism" which would eliminate as unreal everything not capable of clear description and of explanation in exact causal terms. It has been a persistent tendency to "level down" by explaining the higher forms and functions in terms of lower and more primitive ones. It is seen in the strenuous attempts to reduce biology to a mathematical physical science, to reduce psychology to behaviour, i.e. to muscular and glandular functions, and to reduce religion of all types and ranges to the

conditions of primitive anthropology. The right way to meet this swirl of naturalism is to insist upon sounder methods of research, to call for an inclusion of all the facts; to level up; to read in terms of higher functions everything capable of being thus dealt with. Fortunately there are in every field men of first-rate scientific and historical gifts and training who do level up, who intend to deal with all the facts, and who are showing by calm demonstration that naturalism is hopelessly inadequate for the interpretation of the kind of universe which we have on our hands.

But at the same time other persons, possessed of different gifts and aptitudes, have been meeting the predicament in a wholly different way. They have freshly re-emphasized the mystical capacities of the soul. They have insisted that there is a direct interior way to ultimate reality, through "the soul's east window of divine surprise." They have essayed to return to experience, to bring religion back from its wilderness wanderings in the arid realm of logic, rationalism and theory to an empirical foundation in the immediate testimony of first-hand acquaintance.

No implication is here intended that this has been a counter-method explicitly adopted to safeguard religion from the pitiless effects of naturalism. All these matters are much more subtle than that. Tendencies of thought, directions taken by the spirit of man, are like the homing flight of the pigeon. They defy analysis. They are not plotted out in conventions and caucuses. They are like the great ground-swell forces of nature or the dramatic course of history or literature. No man drafts a neat scheme in these matters and then successfully guides the movement toward its goal. The helmsman is invisible. Neither the rudder nor the propelling force is of man's cunning invention. So, too, the mystical revival has come without any planning or contriving. It is a quiet but insistent reassertion of the soul's inherent rights and capacities. If a black beetle could hear itself described by an entomologist and could understand the external, general, abstract terminology of the account, it would no doubt want to protest: "You have missed something. I am more than you say that I am. I am alive, I *feel*, I am unique, I am not a beetle-in-general." Much more natural is it for the soul of man to protest against the generalizations and reductions of science. The learned account does not tally with what we *feel* to be our range and destiny. The whole story cannot be told

in terms of cause, or behaviour, or general formulas. We are persons, we are unique, we feel, we enjoy, we love, we aspire, we idealize, we glorify; we are unfathomable, we find a beyond within ourselves, we transcend all frames of space and time; we have intimations of fellowship with a Great Companion; in the cool of the day, when our spirits are attuned for it, we are aware that Someone is walking with us in our garden, in our office, in our house, in our daily tasks.

Persons who feel that are not going to be calmly catalogued as "man-in-general" or "mere man," or let themselves be relegated to a cold scientific description which omits the soul, the personality, the uniqueness, the eternal and infinite quality, which reduces them to natural beings, curious pieces of the earth's crust, strange dust-wreaths swirled up by the vortexes of a blind universe. At the same time, most of the important books on mysticism which have appeared during the last quarter of a century have been written by men and women of scientific mind and spirit, by persons who loyally and thankfully accept the immense contribution which science and historical research have made to all departments of human life. They have not been obscurantists or defenders of superstitions that have somehow managed to survive from the Dark Ages. They have without doubt been opponents of materialism and mechanistic formulations of life, but in this attitude they have a noble band of supporters from the best ranks of modern learning. They have been resolutely determined to include in their world values of life as well as describable masses of matter, and to respect the testimony of the soul as well as the testimony of the senses.

As soon as we turn to history for information and guidance we discover two well-marked phases in the great onflowing stream. There appears everywhere an experience-phase and a thought-phase. There is life itself as it is felt or appreciated in its own inner flow; and then there is the systematic interpretation of it through the reigning concepts and categories of the successive periods of history. These two stages may well be called "knowledge of acquaintance" and "knowledge about"—implicit experience and explicit interpretation of life. They cannot be cut sharply asunder and treated as independent of each other. Experience is affected by the prevailing currents of thought and interpretation; on the other side, interpretation and thought are coloured by the range, depth and significance of first-hand experience.

This first phase, the phase of life and experience, is persistently neglected, mainly no doubt because it is so difficult to deal with the onflowing stream of life itself. We can describe the objective and universal; we cannot describe *what we feel and are*. What we can point to with the finger is there for all to see, but what goes on within, before the footlights of our own consciousness, is there for us only and eludes the gaze of the multitude. Nevertheless life and experience are too important to be neglected. They are the mother-soil out of which everything spiritual springs, and we are bound therefore to examine them with patient care.

In an age devoted to facts, as ours is, what can be more interesting than these central facts of the soul's experience, of the soul's inner life. Here we have a new and significant type of empiricism—philosophy of experience. If we are to study the way in which this remarkable passion for facts, which we call science, has affected religious faith and thought, then surely we cannot ignore this inner stream of personal experience of God. If we are to take account of the newly discovered energies of physics which are now in the very foreground of scientific interest, we shall do well also to have some report of those other energies, those energies of the Spirit, that have carried men and women into some of the greatest tasks and achievements which belong to the annals of the race. The time will come in no remote period when we shall learn how to deal as adequately with man's inner life as we have learned to deal with the movement of masses of external matter and with ether vibration. But at present we are only in the baby-stage of knowledge and insight about ourselves and our inner domain.

II

In the Scholastic period of the Middle Ages the two phases were inextricably intertwined and interwoven. The great thinkers and the great experiencers were frequently the same persons. Those who *felt* and those who formulated were often one and the same. The *thinkers* believed that they had a master-key to the deepest realities of the universe. They believed that if knowledge could not solve the problems of the world nothing could; if methods of truth-seeking could not arrive at ultimate reality then it could not be found at all. Their method was not that of the laboratory or of experiment; it was the method of analytic logic. They had no

instruments for conquering distance as we have now, nor could they deal with the infinitely small units as we do. They dealt instead with universal principles and proceeded to deduce the concrete and particular. They piled these universals up one above another in a vast hierarchy of ideas or truths, and they devoutly believed that there was a way up through these piled universals to the apex-reality of all things—God. No one who has a sensitive soul can contemplate the work of these successive intellectual builders without a feeling of awe at the majesty of their structures. Their contemporaries were building those marvellous cathedrals which stand as unsurpassed monuments and memorials of a noble faith. But those slowly climbing structures of the intellect aimed to soar beyond all that was visible, to rise above all outward spire-tops and to reach the invisible One, from whom all threads of reality emerge and in whom all that is true and beautiful and good has its home and centre.

Meantime there was flowing on an unbroken stream of mystical experience. The current of life was as much in evidence as were the structures of thought. There have been in all ages men and women who have been conscious of being flooded with tides of life and spirit which they could not trace to any visible source nor to anything within the boundaries of what they call "themselves." Mystical experience, the sense of divine invasion, is as old as smiling and weeping:

"Sometimes at waking, in the street sometimes,
Or on the hillside, always unforewarned,
A grace of being, finer than himself,
That beckons and is gone—a larger Life
Upon his own impinging."

These flushes of spiritual energy from hidden reservoirs, these uprushes of life and power, must be taken seriously into account by anyone who undertakes to explain the origin or the development of religion. Socrates was not the first of the Greeks to feel himself God-invaded, nor was Abraham the first of the Orientals to receive a divine Visitor in his tent. Wherever we succeed in catching a clear insight into primitive phases of life we find evidence of such forms of mystical experience. They are a vital part of the Pytha-

gorean and Platonic interpretation of life, but they are by no means confined to philosophers and their schools.

Such experiences held a very important place in the Neo-Platonic school, and they received a profound study and interpretation in the lectures and writings of Plotinus (A.D. 205-269), the central figure of this school and the spiritual father of European mysticism. He was one of the major thinkers of all time, and with his remarkable dialectic powers was joined a very unusual gift of feeling an immediate contact with a Beyond within himself.

III

It is possible to show historically that the mystical strand was one of the most weighty factors in the religious life of the world before the Reformation. It is also possible to demonstrate that the deep and vital strain of mystical experience in the fourteenth and fifteenth centuries furnished one of the most important lines of preparation for the Reformation itself. Luther in his preparatory period was feeding his soul on the sermons and writings of the great mystics, but even more important is the fact that large numbers of the strong, solid, pious, common people had been finding God as the deepest reality of their lives and had been building the inward pillars of their faith upon the life of God revealed within.

The immense accumulation of mystical thought gained in the school of Plotinus came over into European Christianity through two main channels. St. Augustine was one of the channels and Dionysius the Areopagite was the other. St. Augustine was himself subject in an extraordinary way to mystical experience, but his intellectual life was largely formed by Neo-Platonic influences, and his type and method of interpreting mystical experiences came from that source. Wherever the books of this famous African saint were read—and that was everywhere in Christian circles—they gave suggestions and prepared the way for mystical experiences. The other channel, perhaps wider but not so deep, was the group of writings ascribed to "Dionysius." He professed to be St. Paul's convert on the Areopagus and the first Bishop of Athens, and—by a chance of history—he became later identified with St. Denis, patron saint of Paris, which gave him still more glory and renown. He was in fact probably a Syrian monk who wrote his four treatises about the year A.D. 500. These writings are the source of the

medieval theories of the Angelic orders, "the trinal triplicities" of Dante and Spenser, and he also furnished many of the most important current phrases and categories of later mystical literature. "Dionysius" produced an extraordinary blend of Hellenistic, Jewish, Christian and Neo-Platonic ideas, which gained a remarkable vogue through the apostolic prestige and dim magnificence with which fiction and legend surrounded him.

In the ninth century John Scotus Eriugena, another shadowy but extremely important figure, translated the Dionysian books from Greek—by that time almost a "lost" language—into Latin, which was the current vehicle of religious thought; and succeeding scholars for many centuries wrote commentaries upon them. The mystical stream which flowed through these two channels into the main line of Christian life and thought was of course not wholly foreign. Christianity at its earliest sources was a religion of experience, of life, of joy, of direct contact with God. But there were new elements of life and thought in both of these incoming streams which have tinged and coloured the main current of Christianity. Gregory the Great, Bernard of Clairvaux, Richard of St. Victor, Master Eckhart, Walter Hilton, Lady Julian of Norwich, John Tauler, Jan Ruysbroeck, Henry Suso, Catherine of Genoa, and Thomas à Kempis are some of the greatest mystics before the Reformation who were the supreme bearers of this torch of light and love. But the more important fact is that a multitude of unknown and unnamed everyday saints were kindled and set alight by this same torch of spiritual flame, and when the Reformation came there were thousands of practical, non-literary mystics for every one who reported his experience in a book. These mystics, experts as they were in interior religion and in the things of God, carried the Christian faith down to deeper levels of life and gave it a fresh power of demonstration.

The Reformation brought an immense release of energy which was revealed in a variety of ways. Not the least of the expressions of fresh abounding energy was the new outburst of intense inner life. The struggles for social and economic reform in the outer world have attracted historians and have often been told, but the drama of the inner life has received but scant attention. The main reason for the neglect has been that this new surge of mystical life occurred outside the main current of the Reformation in the multi-

itudinous eddies, swirls, and side streams that came with it. Luther quickly lost his early sympathy for mystics and sternly turned to the tasks of formulating the theology and ecclesiastical system for the movement which he had unexpectedly started. Calvin was one of the most unmystical Christian thinkers who ever lived, and Zwingli was also quite barren of this trait. But nobody has a true historical estimate of the Reformation who only studies a few of the major leaders and confines his attention to the formation of the great Reformed Churches and to the religious wars which followed upon the schism. The common people, too often ignored by everybody except the tax-collector, had their yearnings and aspirations, and there were many among them who were determined, at this crisis, to free religion from the State and from the officialism of the Church and to make it a thing of the heart and life. They had their leaders and champions in almost every part of Europe, though there was little opportunity for intercourse and correlation, and consequently these freer movements were loose, unorganized, and more or less abortive.

But wherever we get glimpses into the lives and motives of the men who directed the common man's Reformation, we find evidence of rich and deep mystical experience. These men were the direct inheritors of the great mystical strain referred to, and these movements were the legitimate continuation of the "inner way" which stretched back to Galilee and to St. Paul's Ægean cities.

The so-called Romantic Reformers were in close harmony and sympathy with these spiritual leaders of the inner way, and they all suffered together as they met the double tide of persecution from the Roman Catholic forces on the one hand and from the Reformed churches on the other. This last-named group was made up almost entirely of mystical humanists from Spain and Italy. John de Valdés was the greatest figure in the early history of this romantic-spiritual movement. No one who reads his books, still vital and palpitating, can doubt the depth and power of his inner mystical life. Ochinus, Servetus, Socinus, Vittoria Colonna, Camillo of Sicily, and the charming French humanist Sebastian Castellio are some of the names of the mystics who followed in the track of de Valdés and endeavoured in the face of hate and fagots to express the religion of the heart and of the interior life.

Another interesting phase of mysticism appears in the early forerunners of science. Science was not born, like Athena, complete and fully-developed. It had its crude beginnings and its day of small things. Physics, chemistry and medicine slowly emerged from alchemy, and astronomy was mothered by astrology. There was therefore a stage of pseudo-science before genuine science stood on its own feet. The men who at this early stage delved into the mysteries of nature had a deep-seated faith that they might find a secret, God-given wisdom by which they would be able to read all these mysteries like an open book. Everything in the world, they believed, was symbolic; everything was double. The visible stands for and reveals a hidden, invisible reality. Man the microcosm sums up the macrocosm, and can thus find within the depths of himself the key which will unlock all the secrets of the world and of life. This is obviously a lower order of mysticism. It is occultism rather than true mysticism, a word which should be reserved to express the soul's first-hand experience of God as a felt Presence. This strain of occultism was, once more, strongly influenced by Neo-Platonism. The Italian humanists had translated into Latin many of the writings of the Neo-Platonists and had given them a great vogue among scholars. The Jewish cult of Cabbala, too, had fascinated some of the humanists who blended it with the revival of Greek mystical thought and so produced a curious medley. This, with the newly awakened interest in nature, the dimly lighted hopes in alchemy and astrology, and the unquenched faith in magic, encouraged the vague belief that *anything* might happen in the world of nature, since at that period almost no universal laws had been established and verified. It should be remembered that Luther, one of the foremost scholars of the age, contemptuously called Copernicus "an old fool."

Cornelius Agrippa of Nettesheim (1487-1535), Aureolus Theophrastus Bombast, better known as Paracelsus (1493-1541), and Valentine Weigel (1533-1588), are three of the most celebrated leaders of this nature-mysticism group. Kepler, too, who finally became a genuine discoverer and verifier of universal laws, carried along with his sound, scientific spirit, a fringe of this nature-mysticism. He believed, in his early stage, that the planets moved in elliptical curves because great intelligences, like the cherubim or

archangels, carried them on their wings, flying in these mathematical orbits.

Jacob Boehme of Görlitz in Silesia (1575-1624) is by far the greatest and most famous of the mystics who believed that they could explain the universe from top to bottom, including the deeps in man's soul, by a God-given, suddenly revealed Wisdom. There is in Boehme's voluminous writings a heavy strand of this alchemical nature-mysticism. It is dark, deep, hard to fathom, and not very rewarding to the patient delver. But there is another and very much more important strand in Boehme. He was a spiritual genius, humanly untutored but God-taught. His writings abound in deep insights, remarkable interpretations of the fundamentals of Christianity, and they set forth one of the soundest conceptions of salvation that appeared anywhere before our own period. When at his best he is a shining example of the true type of noble, constructive mystic. He exhibits and carries along two currents of mysticism—one the crude, occult nature-mysticism, and the other the lofty historical strand come to him through the humanist-mystics of the Reformation period, often called spiritual reformers, of whom John Denck, Sebastian Franck and Caspar Schwenckfeld are good examples.

There is one more impressive line of mystical religion coming down from the Reformation period which, like the other varieties, reflects the influence of the intellectual and social environment within which it flourished. This is the mysticism of the Counter-reformation and the wave of Quietism in France that emerged from it. Before the Reformation broke upon the Church and shook it awake to existing imperfections, there had been many devoted spirits who had manfully endeavoured to reform it from within. After the shock of schism was actually experienced the attempts at inward reform became more urgent and effective. These attempts took many forms which cannot be followed up here, but one of the most interesting of all these forms was an immense revival of mysticism. Some of the noblest men and women in the Church undertook to lead Christianity back once more into an inward, vital union of the human with the divine. These leaders were not content to experience the thrill of personal contact with God. They

endeavoured to chart the lonely road to God, to describe minutely the stages and ladders by which the soul mounts from the seen and tangible to the invisible and impalpable reality. These mystics are the great experts of the *mystic way*. They were no less bold and daring than were their contemporaries, the great explorers who found new continents and circumnavigated the earth. They, too, were like "stout Cortez," and they gazed in surprise, awe and silence upon things before unseen. St. Ignatius Loyola, St. Teresa, St. John of the Cross, and St. Vincent de Paul are the major figures in this fruitful attempt to sound the deeps of the soul and to fortify the Church by linking man with the inexhaustible life of God. They called for a preparation of soul for their spiritual enterprise, comparable only to the preparation of body required for one who is to engage in polar research or for one who is to join an expedition for climbing Mount Everest. Few such heroic endeavours of the spirit have ever been recorded as those found in the annals of these mystical adventurers. They put a new energy into the soul of the Church, and they fired their followers with an indomitable verve and marching power. No one knows the Counter-reformation until he knows this amazing inner life of it.

Hardly less wonderful was the seventeenth century Quietistic movement, developed from the teaching of these great mystics, though the Church was never content with its tendencies and implications, and eventually condemned or censured its three greatest exponents, Michael Molinos, Francis Fénelon, and Mme. Guyon. Its essential characteristic was "the prayer of quiet," a state of contemplation so deep and concentrated that all ideas, longings, aims, hopes or desires were obliterated. The soul, focussed upon God, dwelt in an absolute silence of all the human faculties, and in "this silence of fecundity" it seemed to the mystic that the life and energy of God were infused into the soul, bringing an immense increment of power. This is what Brother Lawrence, who belonged to this school, meant by his famous phrase, "the practice of the presence of God."

The three great personalities named above as the chief exponents of this movement were all gifted writers, and they gave their experiences and their central faith unique interpretation. The result was that while the watchful officials of the Church condemned it and made it a hazardous adventure, it spread with a contagious

quality and became a far-felt influence in the religious life of the period. In fact, the classic books of the movement are still vital and dynamic, though on the whole, I think, it must be said that Quietism carried grave seeds of menace embodying undoubted peril for sound, constructive, co-operative religious life.

Another very different wave of mystical experience and thought appeared in England during the turmoil and unrest of the Commonwealth period. We have in this movement interesting confirmation of the contention that religious mysticism is never something fixed and "repeatable," but always conforms to the intellectual and ecclesiastical currents of the time.

It does not follow the aqueduct method; it responds to the existing contours of thought and feeling. English seventeenth century Mysticism was not negative like the European strand which followed Platonism and scholastic thought; it was not alchemistic like that which attended the birth of modern science; it was not ancillary to a church system like that of the Counter-reformation; it did not distrust human nature nor absolutely negate human endeavour after the fashion of the mysticism of the Quietists.

This new type sprang out of a strong positive faith that there is something divine, something of God, in the inner deeps of the human soul. The most obvious direct literary influences at work in shaping it were the Johannine writings of the New Testament. Expressions like the following are everywhere in evidence: "The Light which lighteth every man who comes into the world"; "Greater things than these shall ye do because I go unto My Father"; "Ye are My friends if ye do whatsoever I command you"; "As Thou, Father, art in Me and I in Thee, so may they also be one in Us." George Fox and Isaac Penington are the best examples of this type. They built much upon great sayings of Christ and the Apostles. But they built much more upon their own experience and upon the fact that in their corporate meetings, in the hush and silence of the group, they seemed to feel the presence of an invading and a quickening Spirit, which made them believe that they had found God experimentally and that divine healing had dropped directly into their souls.

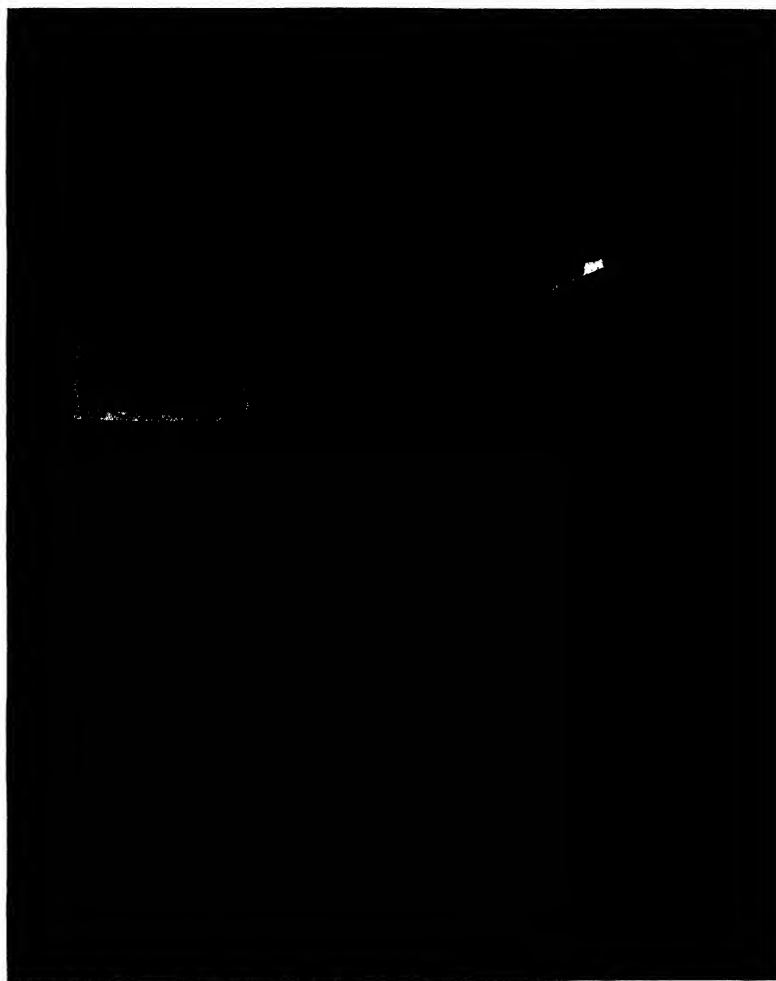
This seventeenth century wave was less organized than most mystical movements have been. It was, too, more dissociated from church control. It had, therefore, a large fringe of fanaticism

and waywardness. It broke out perilously in the Ranters. It was abortive in many of the small sects of the Commonwealth. It produced a few beautiful, but somewhat ineffective, individual mystics like Gerard Winstanley, Thomas Traherne, John Saltmarsh and William Dell. But it was brought into loosely organized form by George Fox, a simple, untrained, mystical genius, like Jacob Boehme, though without his confusion of alchemy. It showed strong propagating power and thus developed a mystical-minded religious society, which has continued more or less devoted to the culture of the inner life until the present time.

William Law (1686-1761), a pure-minded scholar, a devoted Anglican, in middle life came under the influence of Jacob Boehme and produced a series of mystical books, written in singularly beautiful style and marked by depth, fervour and spiritual penetration. He was one of the major forces that carried the eighteenth century from its lethargy, dullness, nationalism and deism down into a deeper religious experience and into a more positive apprehension of the life and love of God. William Blake (1757-1827) was a great mystic in his own disposition and constitution, but he also came under the influence of Boehme, whose spirit lay mightily upon him, and he continued this famous line of spiritual succession.

VI

The great philosophers of the German critical movement were not by any means mystics. Kant, though always possessed of profound faith and genuine personal religion, was strongly opposed to what passed for "mysticism" in his day. Fichte, too, was anti-mystical, and Hegel regarded mystical experience as only a first, implicit stage of religion, to be transcended by clear thought. But in spite of these facts the actual effect of critical philosophy was a new and deeper mystical movement. Schelling, with many others of the period, reinterpreted the great mystical philosopher Spinoza, who had already become one of the supreme influences in forming the intellectual and spiritual outlook of Goethe. Schopenhauer turned to Oriental mysticism as one of the sources of his philosophy of will, and Schleiermacher raised feeling to a wholly new importance as a leading factor both in life and in religion. The outcome in many quarters was a thinly disguised pantheism.



THOMAS CARLYLE.

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but in other directions it awakened a strong tendency toward a new type of mysticism.

This mystical tendency is most apparent in the great poets. Goethe, as every serious reader knows, is profoundly mystical. Baron von Hügel, in his "Mystical Element of Religion," gives a long list of the world's great thinkers, in which Goethe holds a prominent place, and he says: "Shear any of these men of their mystical and metaphysical elements, and you will have shorn Samson of his locks."

English literature of the nineteenth century owes an enormous debt to the German critical school and to Goethe. The German influence appears first and at its noblest level in Samuel Taylor Coleridge and William Wordsworth. Coleridge got the German contributions first-hand, and Wordsworth got them in the first instance through Coleridge, though later he went to the original sources. But Wordsworth carried mysticism to far greater heights than it was possible for Coleridge to reach. "The Prelude" and "The Excursion" are two of the greatest poems in our language, and they are both saturated with mystical thought and feeling. One sees in many personal passages that Wordsworth was gifted in high degree with capacity for mystical experience, but at the same time the form and type of interpretation are strongly coloured by critical or transcendental philosophy.

The direct influence of the above-mentioned philosophy is even more marked in the cases of Thomas Carlyle and Ralph Waldo Emerson. "Sartor Resartus" expressed with impressive effect the central idea of this movement: that the divine is not remote and far away, but that God breaks through nature, which only thinly veils Him, and reveals Himself in human life, especially in men of genius. Emerson drew more strongly than the other poets did upon Schelling, though Plotinus and Boehme were contributory streams of influence. His over-soul doctrine, which is his central idea, is a fusion from all these sources of thought. At the same time he made it his own idea and gave it a unique interpretation in his essays and poems. The two essays on "Nature," the essay on "The Oversoul" and his poem "The Sphynx," furnish sufficient evidence of a profound strand of influence from transcendental philosophy on the thought of this rare and beautiful spiritual genius.

Alfred Tennyson had in a number of instances very striking

mystical experiences, which are described in his "Memoirs" (written by his son Hallam), and which furnished first-hand material for several passages in his poems, notably in "The Ancient Sage." He was further influenced by almost all the great sources of mystical thought. He was a careful reader of Kant and his successors, of Goethe, of Spinoza, and of the classical contributors to mysticism. He held as a fundamental view of his life that the human soul draws its origin and separate existence from the boundless deep of Spirit, and he believed that throughout this earthly life:

"Spirit with Spirit can meet,
Closer is he than breathing, and nearer than hands and feet."

There is a deep strand of mystical thought running through the entire collection of Robert Browning's poems. He was not, so far as we know, subject in his own person to mystical experiences, though some of his accounts of such experiences attributed to others are written with so much power and insight that one feels that he himself must at least have had very intimate sympathy with those who see God. He says in "Christmas Eve":

"Where I heard noise and you saw flame
Some one man knew God called his name.—"

In his youth he made a searching study of Paracelsus and of the movement of which that famous seeker and mystic was a part, and in his extraordinary poem dealing with Paracelsus's inner life he shows clear comprehension of that pseudo-scientific stage of mystical thought. But the prevailing type of mystical feeling in Tennyson's religious poems conforms more closely to the teaching of the Gospel and Epistles of John.

VII

We come finally to the impressive revival of mysticism in recent times. It is not confined to any one country, nor to any one intellectual level of life. On the contrary, it has touched all lands, all denominations, and all stages of thought. We are not here concerned with the marked increase of superstition and obscurantism that has emerged since the beginning of the Great War. It was something to be expected in such a vast emotional upheaval as

that through which we have passed. Let us rather consider that calm and deep type of mysticism which puts the emphasis on the spiritual nature of man's inmost self and its direct communion with God.

The mysticism of this century has been much more positive and affirmative than was the mysticism of the classical type. We hear little to-day of the *via negativa*; that is, the way to God through a persistent withdrawal from all that is concrete and finite, so that when one arrives at the apex of the journey the goal proves to be an infinite nothing, "the alone with the Alone." Ecstasy, too, has fallen to a much lower valuation than it once held. Ecstasy is no longer conceived as essentially miraculous and supernatural; it is thought of rather as pathological and psychopathic. One does not look for the infinite beyond the finite, the eternal beyond time. The unseen and perfectly real are sought and expected here in the midst of things we see and touch. Jacob's ladder is "pitched betwixt heaven and Charing Cross," and Christ walks on our crowded water-ways as well as on Gennesaret of old. We do not need to "go out of ourselves," to obliterate our pricelessly precious personality, to kill the *me*, in order to find the Beloved of our souls, any more than we should expect to get electricity by first destroying the dynamo through which it is to reveal itself, or to find what life is by first destroying the concrete forms through which life shows its nature and its beauty.

The mystic of to-day believes that the basis of our universe is fundamentally spiritual and that man's basic nature is also fundamentally spiritual. "Deep calls unto deep," "like knows like." These are ancient phrases which still fit the facts of experience. Our lives open inward into a world certainly as real as the one we see with eyes and touch with hands. The mystic therefore "builds inward," and cultivates that sacred interior precinct. But no wise mystic discounts thereby the value of the seen and the outward. He does not reject his daily food anticipating that divine manna and the bread of life are to be granted to him. He does not refuse the aid of the visible sun while he is looking for inward illumination. Neither does he, nor should he, discount the inspiration and help of the Scriptures and the visible Church while he feels the awe and wonder of a divine manifestation within himself.

The discovery during the last half century of the importance of

the subconscious in man's life has also been a contributory factor in the present mystical awakening. F. W. H. Myers, who was one of the first to call attention, in a vivid and emphatic way, to the deep-lying subconscious strata below the threshold, coined the word "subliminal," and maintained that there is in us a "subliminal self," separated by a thin partition from our surface, or waking, self, and that "incursions," "inrushes," "invasions," from beyond come across and produce tremendously significant effects. William James tentatively accepted much of Myers's teaching and gave it powerful interpretation in his epoch-making "Varieties of Religious Experience." He there speaks of "a thin partition through which messages make irruption." Most teachers to-day do not now use this terminology. They do not separate man's inner life into sundered selves with a partition between, thin or thick. The inner life is thought of as a unity with vastly varying degrees of consciousness, of awareness, of concentration, of integration.

Religious experiences of the mystical type are far more common than the earlier books on mysticism allowed or implied, or than most persons suppose. They do not need to partake of the abnormal or of the extraordinary. Experiences like those of which H. G. Wells speaks in his "First and Last Things," for example, do not surpass what occurs in the lives of a vast number of sane, everyday men and women. He writes: "At times in the silence of the night and in rare lonely moments, I come upon a sort of communion of myself and something that is not myself. It is perhaps poverty of mind and language which obliges me to say that this universal scheme takes on the effect of a sympathetic Person, and my communion a quality of fearless worship. These moments happen, and they are the supreme fact of my religious life to me; they are the crown of my religious experience."

Another testimony, this time from a life-long scientific worker, will throw further light upon the experience under consideration. C. Lloyd Morgan in his "Emergent Evolution" says: "Within us, if anywhere, we must feel the urge, or however it be named, which shall afford the basis upon which acknowledgment of Activity [God] is founded. What then does it feel like? Each must answer for himself, fully realizing that he may misinterpret the evidence. Without denying a felt push from the lower levels of one's being—a so-called driving force welling up from below—to

me it feels like a drawing upwards through Activity existent at a higher level than that to which I have attained."

A third account is taken from a well-known psychologist, Dr. William Brown of Oxford University. His "Religion and Life" contains these remarks: "You can have mystic feeling, a feeling of union with the universe, at very different levels. . . . You get it at its highest form in religion. . . . If I may speak no longer as a psychologist but as a man, the experience of life confirms my belief that the possibility of some communion between that Power and the individual is not an illusion."

What we need to take into account is the profound inward depth of the human self, and the normal implications of self-consciousness. The best present-day students of mystical experience are dealing with these aspects of it rather than with abnormal traits. Henri Bergson's very interesting treatment of intuition and of the vital urge of life, while it is an excessive emphasis, no doubt, and divides intuition too sharply from intellect, has helped all his readers to see that there are capacities of intuition, flashes of insight, in us all which enable us to deal with the deepest realities of life in other ways than by analysis and logic.

Those who contend that the universe in its ultimate nature is spiritual hold that our consciousness is double-doored like the Temple of Janus. It looks out through numerous peripheral senses on a world of moving matter arranged in a space-frame, and it is environed inwardly by a beyond of which it partakes. A self without this beyond would be as absurd as a stick with only one end or a door with only one side. We have organized our outside world or are organizing it. We have discovered many of its laws and habits, and we have coined a rich vocabulary for discussing it. But we are still almost like new-born infants with respect to the inner life. "Many are amazed and many doubt." We do not know its laws and processes; we have a most slender vocabulary for talking about the gleams and flashes which occasionally break in upon us. A few rare souls—the Newtons and Galileos of the inner life—have seen farther than the rest and have tried to give us their testimony to this "world within the world we see." We are, however, still in the dawning stage of mystical experience and of truth about our world within. But it is a notable fact that many of the greatest individuals who have ever lived have been mystical-minded. The

tendency to mysticism is thus evidently not morbid or pathological. Mysticism betokens a great mental depth and breadth, and it adds to our constructive energy. It is not a functionless trait, an abortive survival from the pre-scientific man—the cave man or his primitive predecessor; it is not a waning power. It is a fundamental capacity of man's soul and it is big with future possibilities. It may in some of its phases appear to be a protest against the findings of science. But in its better and purer forms mysticism is not hostile to truth gained from any source or by any methods. It does not decrease or fail in periods of scientific intensity. Nor are its exponents by any means obscurantist or anti-scientific. They only insist that there is an inner way to truth and life which is missed by microscope and spectroscope, and that the experience of God is in its own right a weighty evidence and testimony to another kind of world.

CHAPTER XXV

THE NEW PERSPECTIVE IN THEOLOGY

BY PROF. F. C. BURKITT, F.B.A., D.D.

In some ways the Bible is now more intelligently and sympathetically regarded than it ever has been before. Yet the concept of revelation has altered, and certain of the inherited positions and ideas have been abandoned.

THEOLOGY was once called the Queen of Sciences. It occupied that position not by conquest or the assertion of dominion, but by the nature of things as then understood. The curious speculations, now so much discussed, as to whether there is some special religious sense, were hardly conceivable, because so many of the decrees or axioms of theology imposed themselves directly upon every avenue of the senses. Theology was embodied in the Church; the theologian was only making explicit in words and reasonings what was implicit in the Church's doctrines, and in the Church there was believed to be sufficient authority to pronounce upon the correctness, or otherwise, of the theologian's words. And further the Church had in Holy Scripture a large body of literature containing authoritative and often quite definite information upon all the most important departments of human life and thought.

In the sixteenth century there came a great disruption. All through the preceding century the mental and social fabric of the Old World had been breaking down. The Papacy was discredited by schisms; General Councils of Christendom, such as Constance, had failed to discover for it an elixir of life. The Roman Empire had become, in all but name, a mere German realm. The feudal system was altogether decayed, and in its place stood nations distinct in language, customs and material interests. Meanwhile, as the old system fell to pieces, the most acute minds were turning to the ancient wisdom of heathen Greece and Rome, to a civilization that

had existed before Christian theology was born and that seemed to the eager eyes of the Renaissance scholars to grow fairer and grander the more it was explored. And on the top of all this came the startling discovery of an actual New World. In a way that every man could understand it altered the balance of things: Jerusalem was now no longer the centre of the earth.

Nevertheless the Reformation did not bring at once so great a revolution in theology as we now see was ultimately inevitable. To the modern historian of theological dogma what is so obvious, in comparing Roman and Protestant theology of the Reformation period, is not their difference but their agreement. The Protestant rejected the external authority of the Church, as embodied in the Pope and the papal system, but the most important of all the Church documents retained its authority. To Protestant and Romanist alike the Bible remained an infallible source of precept and information. On certain matters indeed the Bible prescriptions were insufficient or of doubtful meaning, and here controversy flourished, but where the meaning of the text was clear all Christians accepted what was written.

There is yet another matter upon which all parties at the time of the Reformation were in general agreement, though the modern tendency is very different. This matter is the authority of the past. In the sixteenth century the only open question seemed to be the date of the epochs to which appeal should be made. The Calvinist appealed from present customs and corruptions to the first century A.D., the Anglican admitted the evidence of the first four or five centuries. But both alike looked back for an authoritative standard. Nor was this attitude adopted only in affairs of religion. In literature, in medicine, in questions of political or natural science, men turned to what the ancient Greeks and Romans had written rather than to the world around them.

Gradually, however, it was found that the discovery of America was only one of a great series of discoveries, which all had this in common that they were unknown to the men of old time. The greatest of all, of course, was the Copernican conception of space and the solar system, whereby the old heavens rolled away and left our earth as a second-rate planet instead of being the centre and main body of the universe. Yet this paralysing discovery led to so accurate an acquaintance with the configuration of the heavenly

bodies and the laws of their interacting movements that eclipses, instead of being omens and portents, could be calculated in advance, years before they occurred. The ancients had known nothing of this, neither the Christians nor the Heathen.

What was first done in the field of astronomy was repeated in many other branches of science. Lightning was explained and made innocuous. The nature of plants and animals was studied as it had never been studied before, and the startling analogies between man and other living beings on the earth, both in structure and function, were brought home to all educated persons.

But scientific investigation is concerned not only with the present; it scrutinizes the past by methods which allow us moderns to put tradition on its trial in a way that was never dreamed of in former years, and this has had a direct bearing on our view of the authority of the Bible and the message it contains. Unlike some other religions, Christianity must always be in a certain measure dependent on the past. The traditional Christian creed not only contains an enunciation of eternal, theological doctrine, but also a good many statements about special happenings, one of which at least ("suffered under Pontius Pilate") is certainly an event of past history. To a certain extent the Christian faith includes acceptance of an inheritance from the past. If a Christian has any right to his name his religion must put Christ in a central place and give a central meaning to things that happened nineteen hundred years ago.

In most formulations of the Christian faith a good deal more than a belief that the career of Jesus was central is expressed. Belief in the historic Church, in sacraments, in a sacred ministry, takes a prominent place. This was healthy and natural, so long as all parties were looking back to the authoritative ages in the past. Past authorities, not present needs, were the supreme arbiters. Now the inevitable has happened. Christianity has become "old-fashioned." It seems to be not quite in touch with modern requirements, modern aspirations, modern possibilities of belief. There is, even among believers, a feeling that Christianity is hampered by some of its inherited possessions, things that may have been valuable once, but now are a source of weakness and anxiety.

The Christian and his religion is somewhat in the position of many an heir to an historic estate. He finds himself in the possession of great revenues, but they are all swallowed up in the expenses of

keeping the concern going. A good many of the sources of revenue do not bring in as much as they did, and yet the dependents of the estate need more and more to satisfy their requirements. It is no wonder that in such a case the historic inheritance takes on the guise of an encumbrance.

The parallel is more than a mere fancy, for the ultimate source of the modern Christian's embarrassment comes from changed conditions of life, both social and physical. But the most serious of all are the changes which have taken place in our view of the past. "The Bible, the Bible alone, is the religion of Protestants" wrote William Chillingworth (1602-1644), the friend of Laud: what is certain is that the Bible holds a quite different position in the present day from what it occupied during the first three centuries and a half that succeeded the Reformation.

Some Christian apologists are accustomed to represent the results of the modern study of antiquity, and of Biblical antiquity in particular, as a mere readjustment of the traditional dates of the various books and of the names of the traditional writers. It is very much more than this. It is a severe blow to the old conception of the Bible and of the Authority with which the Bible speaks. Older unbelievers in Divine revelation had hinted at fraud or deception. Such accusations could always be refuted, for they were false. But the new studies of natural science, and later of scientific historical archæology, have in a sense done worse. They have, so to speak, just put the Hebrew Scriptures in their place among the folk-lore of Asiatic peoples. Christians still consult their Bible for matters of conduct and worship, but it is no longer an authority for the constitution of the physical universe, or even for the ancient history of mankind except in so far as it preserves local legends of Western Palestine. We have become acquainted with the ancient history of Egypt and Babylonia from their own contemporary records now deciphered, and we can carry back the tale of the human race into the remote periods when they chipped flints and hunted the extinct mammoth in Southern Europe more than 15,000 years ago. What authority can the tales of Adam and Eve and of Noah's flood have for our generation?

All this is trite and familiar. The battle between the Bible and science, as it used to be called, which raged in the days of Huxley and Queen Victoria, has long died down, and Christians sometimes

forget, owing to the easy tolerance of a materialistic world, that "Science" won all along the line. It is not the case that those who study the records of the Christian Church, whether in the story of its beginnings in the New Testament or in the story of what led up to it in the Old Testament, find that these records are worthless, far from it. In some ways the Bible is now more intelligently and sympathetically regarded than it ever has been before. But it has lost its old Authority: the modern student feels he has ample right to judge whether he will accept or reject the information which the Bible supplies, and many direct and fundamental statements in the Bible about the past are now simply disbelieved. By way of illustration I give two instances: "the days of Noah . . . wherein few, that is, eight persons were saved by water" (1 Peter iii. 20), and "by one man sin entered into the world, and death by sin" (Rom. v. 12).

The great result of all this has been entirely to transform our concept of revelation. It was formerly regarded as information imparted, as data to be incorporated into any formulated scheme of theology. Now the old concept can no longer be maintained, and it is difficult to formulate anything which does justice to what comes to us from the past and yet is sufficiently in touch with modern conditions. In the old days the Authority by which it was considered that all causes must be tried was almost always something in the past, now it is something in the present. The appeal is made to what is called "experience." It is as if we were living in a State where the only valid titles to property recognized are occupation of the ground and the production of satisfactory crops. In such a State the possession of venerable title-deeds is of no use.

The general indifference of the modern Englishman for ancient history is to be regretted. In his heart he regards it as a back number. He will endure to listen to its tales, if they are well told, but he will take no commands from the past. If we are to commend the Christian religion to the modern Englishman, so that it may become to him an authority and a guide, it must be from something valuable which it offers him in the present. It must be a religion adapted to present-day needs and present-day knowledge. Nevertheless Christianity is, as we saw at the start, intimately bound to the past. It will be no remedy so to modernize our Christianity that it has no right to the name, and (what is more important) none of the power

that Christians declare to come to them from the past. Obviously our first duty is to get a clear idea in what our indissoluble link with the past consists.

The direct connexion of Christianity with the past is indicated in the creeds by the mention of Pontius Pilate. It serves to remind us that whatever else Jesus Christ may have been He was an individual who had a career in the past so many years ago. Christians believe that this career made somehow a real difference in human life, or at any rate made manifest a relation between human life and the powers that govern it—in other words, between God and man—which was not manifest before. The link between Christianity and the past is, obviously, the historical Jesus. That which brings the Christian into real touch with Jesus is essential, that which does not help the Christian to get into touch or to keep in touch with Jesus is unessential.

This sounds definite enough, but in practice it does not take us very far, for it is acknowledged in terms by everybody, while the most varied theories are held as to the things which do keep us in touch with Jesus. I do not mean controversy about the details of the Gospel history or the criticism of the Gospel. In the past fifty years the critical study—in other words, the intelligent scientific study—of the tale told in the Gospels has been prosecuted with immense vigour and devotion. In my opinion this effort has met with signal success, and the curious student who chooses his guides well has already a much better opportunity than ever before of seeing the figure of Jesus the Nazarene against the background of the world of thought and action in which He lived. As I say, I am not now thinking of controversy about the details of this picture: the materials for drawing it are ancient documents, such as the Gospels themselves, and the weight and firmness of the lines such documents are allowed to trace in making our picture are determined by the same kind of critical study as is used for other documents of a similar class, such as ancient biographies of the saints and other heroes of old time. In another fifty years I imagine that this kind of investigation will have reached its natural conclusion: we shall have found out all that the documents can show us, we shall have learnt with what precautions and what enrichments we should read the Gospel according to St. Mark if we wish to gain an historical view. The specialists, the antiquaries will have done their

work, and we shall be able, to a certain extent, to know Christ after the flesh.

What effect will this portrait of Christ, as redrawn by victorious historical criticism, have upon the minds of Christians? Will it be of any use to the preacher, or to the worshipper? Here, as elsewhere, I have two things in mind: the inner necessity that Christianity has of not losing touch with the Christ of history, and at the same time of being in vital contact with the needs of the present. We started with the notion that some of the inherited positions and ideas of Christianity are out of date and have become encumbrances. Now much of the "liberal" tendencies of Christians during the nineteenth century could be expressed in the formula "Back to Christ." It was felt that the Saviour's figure had been hidden by ecclesiastical conventions and theological dogmas; if only we could get behind these to the real historical Jesus all would be well! And indeed, from quite another stratum of Christian feeling, how often has not the watchword "Jesus only!" seemed to good and pious folk to be a sufficient summary of their religion.

Ancient Christian theology consistently refused to regard "Jesus only" as a sufficient summary, and I venture to claim that the course of critical investigation into the early days of Christianity has justified the theologians. Critical investigation has surely not at all diminished the greatness of Jesus, but it has fastened Him more than ever into the first century A.D. Our efforts to set Him loose from the shackles of ecclesiastical ideas have succeeded. He has moved out free; and He has stepped, not as the Liberals hoped into our arms, but into His place in His own age. By a mental effort we can follow Him there, if we are well enough equipped. We can steep ourselves in Jewish ideas, in the hopes and fears of the pious Jews with whom the victorious struggle of good over evil, of social righteousness over oppression, of health over disease, was inextricably mixed up with the struggle between Jew and Roman and with belief in a rapidly approaching cosmic catastrophe. We can trace how Jesus accepted in general this world of ideas, while rejecting those parts of it which were rapidly leading the men of His nation to disaster. We can see how He united in Himself a belief that He was the last and highest messenger of God to His people together with a full acceptance of the principle that this high calling would inevitably lead Him to suffering and to death. And so, ever since the time of

Jesus, men have learned to believe that the highest destiny is likely to involve the bitterest suffering and the least material reward. It is a grandiose conception, that recognizes both the soaring self-consciousness of man and his physical insignificance. The more we immerse ourselves in the world in which Jesus lived, the grander and more heroic does He grow to us.

But the more we immerse ourselves in the world in which Jesus lived, the further we get from life in the present. The more we perceive how wise His counsels were for the circumstances of that far-off time, the less can we apply them as *fixed rules* for the very different present day. And this is the case, however much we may be impressed with the abiding value of the principles on which they were based. We need a Saviour and a Guide in the present, not merely a Hero in the past. The historic figure of the Lord Jesus cannot altogether stand to us in the place of "God," and we shall do well not to refuse the help which the Christian doctrine of the Holy Spirit affords to our thinking. To St. Paul, indeed, there seemed to be little difference between the Spirit and the risen and exalted Jesus, the object of his devotion. "The Lord is that Spirit," he says, quite distinctly (2 Cor. iii. 17). But this limitation of "the Spirit" is really inadequate, if we hold fast as we must to the historical career of Jesus Christ. What does "the Holy Spirit" mean? We need not here consider the ideas of early Jews and Christians about the mechanism of intelligence; what is clear is that by the Holy Spirit Christians mean that force or element or tendency in man, or at least sometimes in some men, which is really akin to God, which really makes for right and good and not for sin and evil, and which therefore has insight into the mind of God. We cannot simply identify this with the mind of Jesus Christ, if we are to keep Jesus Christ as a real historical individual. And so, sixty or seventy years after the Crucifixion, we find in the fourth Gospel a clear distinction drawn between the two. "I go away," says Jesus there; "another, the Paraclete, will come to you. It is good for you that I go away, the other will guide you into all truth"! The Evangelist does not mean that the truth which the Paraclete was to teach was different from the principles taught by Jesus, but that it would be an expansion and an application of those principles to changing circumstances.

Still more important it is to feel that an indiscriminate cult of

Jesus obscures the Father, to Whom Jesus directs our devotion. Real belief in God our Father is not easy. It was not easy in the first century A.D. and it is no easier in the twentieth. Can we really feel ourselves akin to the great Power behind the universe? Can we really hold converse with God? Is it any use to pray? It seems to me that the answer can be "yes" only if we believe that we have, or can have, in us a real spark of divinity, i.e. if we have a real doctrine of the Holy Spirit; and that it makes it a good deal easier to answer "yes" if we believe that the intercourse which Jesus felt Himself to have with the Father was real and not a delusion, that when Jesus spoke about "Him that sent Me" Jesus was right in His conviction. We can have the experience of God that Jesus had, and if Jesus had real intercourse with God we can have it too.

These are the essentials of Christianity. They sound perhaps tame and common-place, but in all seriousness they are great assumptions, far beyond what can be strictly proved, and so they can only be held by "the venture of faith," as something that satisfies what our heart demands. And when I speak of these things as essentials I do not mean that nothing more is desirable, though indeed one association of Christians, the Society of Friends, finds it very nearly sufficient. What I mean is that if we do not accept the scheme of theology I have sketched out, it seems scarcely worth while to lay claim to the distinctive name of Christian. What I have put down is the necessary link that connects present-day Christianity with the past. The other things associated with the Christian system appear to me to come under the modern conception of authority, that is to say, the only valid reason for retaining any of them is that they prove themselves to be useful.

Some of all this may perhaps sound a little vague. Let me therefore point out by an example in what way the principles here sketched out differ from what is often maintained. In general those who feel Christianity to be out of touch with the present age profess themselves anxious to get rid of what they call "dogma." To such people the past to which Christianity is tied is something not so much like the creed as the New Testament. I venture to think this view can only be held by forgetting what the New Testament puts before us, by shutting one's eyes to the immense gulf that separates us from the Christians of the New Testament. This is particularly the case in the matter upon which thought is now most active, namely

in questions of morals. The Western world is now obviously trying to reconsider and ultimately to reformulate its ideas on marriage. I am not referring to any particular matters of dispute, for they are all single waves of a great and general disturbance of the ideas which till about half a century ago had long been accepted about the proper relations between men and women. The matters in question are not only those of the Divorce Court: there are besides, not to go outside the ecclesiastical sphere, questions relating to the eligibility of women for the Christian ministry which have been raised in quarters where fifty years ago such things would not have been dreamed of. Conditions have changed; and in proportion as conditions have changed the mere rules of conduct will change with them. It is equally true, of course, that in so far as conditions have not essentially changed the right rules of conduct remain unaltered, but in this matter it is obvious that the dependence of women upon men, economically and intellectually, is very different from what it was.

Now in all this great disturbance, how far is Christian practice and theory determined by the past? What is the nature of that authority with which Christian antiquity speaks? What to us now, in our transformed society, is the force of the scornful sentence, "We have no such custom, neither the Churches of God"? Is it not sometimes appropriate to remember that Tertullian once, when what he wanted was something different from the local usage, ventured to remind himself and his contemporaries that our Lord did not say "I am custom" but "I am Truth"? Well, then, must women for all time keep their hats on in church (if they want to take them off), because St. Paul once said so? In my opinion this is a not unimportant question, because if we can answer it on general principles we shall know, more or less, what binding validity our Lord's words, and regulations of Canon Law based on a literal acceptance of them as fixed rules, have for all time in the matter of divorce.

This is not the place to discuss the Marriage Laws, nor is it my aim to defend or attack any proposed alterations in them. I would only claim that what is right or wrong for Christians at the present day cannot be settled merely by the authority of the past. The clearest and most authentic precept of Jesus Christ is not necessarily binding, except in so far as the conditions of the problem have remained the same. And this restrictive clause means that we must

try and understand the social conditions of the first century, and those of the present day also, before we take any word out of the past as binding for us and for others.

Doctrines of this sort do not necessarily lead up to immediate or drastic changes in practice. It is with the attitude of mind with which we are here concerned, with the new perspective caused by the weakening of ancient authority. What the future has in store for Christian Institutions and Christian Theology seems to me as impossible to foresee as the future of the League of Nations or of Marxian Socialism. But as I said just now, there are the two things that must be considered and considered together: the inner necessity for anything that is rightly to be called Christianity of not losing touch with the real Christ, and at the same time of being in vital contact with the needs of the present. The first of these things is only to be attained by what may be best called *study*—I mean, a sustained effort to put before our minds an intelligent idea of what Jesus Christ was to His own age, when He walked this earth among men. It cannot be done by mere sentiment, or by rough and ready attempts to modernize Him. If He be nothing to us, or not very much, as a character speaking to us from His place in the past, it is not very likely that He will ever be really very much to us in modern worship, whether ritual or sentimental, or that He will be a decisive factor in our lives.

As I said, these considerations do not necessarily lead to revolutions or radical changes. The chances always are that the various Christian Churches are too little influenced by Him whom they call Lord, and have too little comprehension of the real tendencies of their own age, and so they become neither reactionaries nor revolutionaries, but common ordinary drifters down the stream of human life. The real trouble in the Church, in the Anglican Church, in the Roman Church, in the Free Churches, is the decay of active belief in God, in other words, in the very centre of religion. The Church, social work, human comfort and welfare, the progress of science, these are much more tangible. Some who call themselves Christians would feel lost if their efforts for these things were brought to an end. Former ages imaged the bliss of the saints as unimpeded Divine contemplation: how few now-a-days even try to practise it! As for theology, as distinct from ethics and ritual, I do not suppose the majority of modern English men and women would be distressed

if it were altogether eliminated. They have learned to make their own judgments of value: they know from the opinion of their contemporaries what is good and what is evil, they do not know much of the real Jesus Christ, who lived a long while ago and can only be studied by a mental effort, while as for God, "no man hath seen Him at any time." To these, and I am sure they are the great majority of Englishmen, Christian theology seems to consist of sweeping statements about matters in which certainty is impossible, formulated by men of past ages who were dominated by fixed ideas, some of which have turned out to be baseless.

Many of those who still go to Church do not think so, but in the streets and shops outside the Churches such opinions are those of the majority. Our contemporaries will not now listen to the voice of external authority, to the voice echoing from an unknown past. They will only listen to something that belongs to the present, something that we can exhibit to them here and now. It is a very difficult task to formulate anything we can give, which those outside can really grasp and which at the same time contains that grace and help which the Christian feels to come to him from the past, from his venerable religion. That is one, perhaps the chief, reason why it is so imperative that every Christian should endeavour to sift out in his own mind what is essential in the miscellaneous articles of his faith.

CHAPTER XXVI

IMMORTALITY

BY THE REV. PRINCIPAL A. E. GARVIE, M.A., D.D.

A survey of the problem of human destiny as dealt with in many philosophies and religions, together with a summary of the objections to, and arguments for, the belief.

THE value of the Christian hope of immortality can best be shown by a comparison with other solutions of the problem of human destiny:

(1) Even if there was a *pre-animistic* stage of human thought, we may start with *animism* as probably the primitive philosophy which is the basis in thought of the early stages of man's religious development. Animism is the belief in a soul distinct from the body, inhabiting and controlling it, separable temporarily from it in sleep, and permanently separated in death. This survival of the bodiless soul was anticipated not with hope, but with dread. The abode of the dead was regarded as a cheerless, hopeless, shadowy realm.

(2) In the Hebrew psychology there appears to be a modification of this animism. It is when God breathes His Spirit into the body made of the dust of the earth, that man becomes a living soul (Gen. ii. 7). The corpse itself is called the *nephesh* or soul in Num. v. 2, a use of the term which is "best explained through the idea of the body, dead or alive, as the 'person,' somewhat as the Syrian cognate has come to mean 'tombstone,' the visible representative of the dead" ("The Christian Doctrine of Man," by H. Wheeler Robinson, p. 17). Moore in his commentary on "Judges," p. 362, makes the very decided statement: "There is nowhere a suggestion that the soul survives the man whose life it was; the inhabitants of the nether world (Sheol) are not *souls* but *shades*." Most terrifying is the description of the shadowy realm in the taunt song addressed by the shades to the King of Babylon:

"Art thou also become weak as we? Art thou become like unto us?" (Isaiah xiv. 10). That realm is ever beyond the reach of God's rule (Ps. lxxxviii. 5); there even the saint's fellowship with God is ended (Ps. vi. 5). God's relation with man is confined to the earthly life in the body, and here only can the good of life be enjoyed. The Hebrew did not, like the Greek, think of the body as the grave or prison of the soul, from which death brought release; for him the man was the body animated by God's Spirit. The standpoint of the Old Testament is not "other-worldly," but "this-worldly."

There is no agreement among scholars as to the question, whether the hope of individual immortality appears in the Old Testament or not. The English translation, read with Christian associations, suggests what an exact exegesis of the original text does not sustain. Wheeler Robinson maintains that there is no assertion of immortal life in Job xiv. 13-15, or even xix. 25-27, although for the Christian ear the words "I know that my Redeemer liveth" seem to sound the note of triumph over death. The reference in Ps. xvi. 10-11 is held to be to a recovery from a dangerous illness, and in xvii. 15 to renewal of confidence in God with each returning day. Some scholars hesitate, however, in denying a passing gleam of this hope in Ps. lxxiii. 23-26. "It is doubtful," says Wheeler Robinson, "whether this recognition of the Divine presence, support and guidance, this utterance of devoted and exclusive attachment, this faith in divine power, ought to be directly related to more than a present deliverance; still, as in the case of Job, such a personal relation to God implicitly demands more, and can only be satisfied with a doctrine of personal immortality. Indeed we ought to group together, as chief factors in the development of that doctrine, both the need for a solution of the problem of individual retribution, and the claims of spiritual experience entering a realm where it knew itself to be above death" ("The Christian Doctrine of Man," p. 41). Those who find in these passages the doctrine of immortality, should observe that it is not given as an assurance from God, but as a postulate (to use a Kantian word) of the moral conscience and religious consciousness.

As the Hebrew religion was national, so was its outlook on the future. The doctrine of resurrection was connected with the Messianic expectations for national deliverance, security, prosperity,

dominion, righteous rule. To participate in this coming good the righteous will be raised again to earthly life (Isa. xxvi. 19). This passage is certainly post-exilic, and may be as early as the fourth century. The Book of Daniel, which belongs to the second century, is a specimen in the Old Testament of the Apocalyptic literature of Judaism, as the book of the Revelation is in the New; and it includes in the Resurrection both the righteous oppressed and the wicked oppressors (Dan. xii. 2). The Sadducees refused to accept this doctrine, regarding it as an illegitimate innovation, but the Pharisees accepted it with a gross literalism, as the illustration used to reduce the doctrine to absurdity shows (Mark xii. 18-23). Jesus rebuked the literalism, but asserted the hope of an immortality other than the renewal of the earthly life (verses 24-27). He bases the assurance of continued life on the experience of fellowship with God. If God has so intimate a personal relation to individual man as the Old Testament words indicate, then eternal life is assured. Still more did His revelation of the relation of God as Father to man as child afford the assurance of the continuance of the loving fellowship.

(3) The Apocalyptic literature gave to the Messianic age a more transcendent character (a heavenly, and not an earthly Kingdom). For the primitive Christian Church this was transformed by the faith in Jesus as Risen Messiah into the expectation of His Second Advent in power and glory, including the resurrection and the final judgment; and this teaching rests on the authority of Jesus Himself, and His teaching had the seal of certainty set to it by His own resurrection from the dead, the belief in which was the foundation of the Christian Church. In only one passage, however, does the resurrection of the wicked appear to be taught (John v. 28-29, cf. Acts xxiv. 15); but this teaching is not supported by any distinct utterance of Jesus as recorded by the Synoptists, is inconsistent with the general teaching of the fourth Gospel itself, and is absent from Paul's representation of the resurrection (1 Cor. xv. 22-23); and should for these reasons be regarded as a later interpolation. Some scholars hold the view that the general structure of the Pauline theology requires a resurrection of the wicked and that this is definitely affirmed in 1 Cor. xv. 22. But there is a considerable body of expert opinion to justify the assumption that according to the explicit teaching of the New Testament the wicked have no

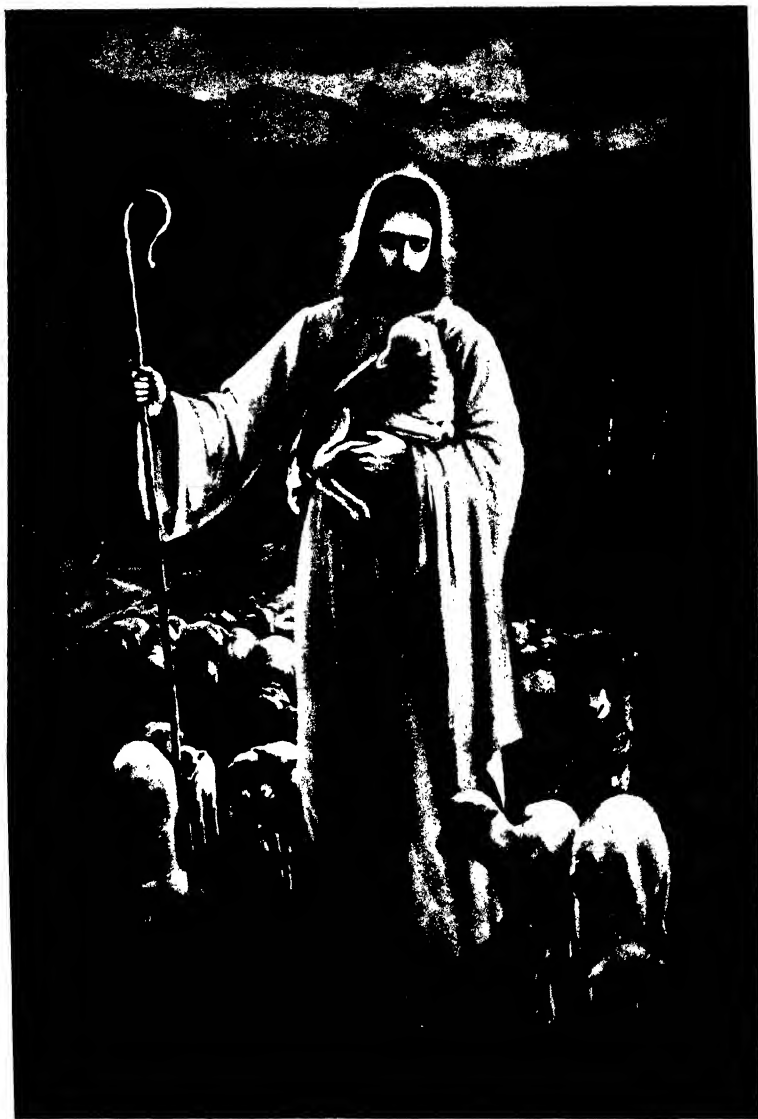
share in the resurrection, but that only the righteous will be raised in the spiritual body in incorruption, glory, and power (1 Cor. xv. 42-44) to share with Christ His Heavenly Kingdom.

This hope is found in the Pauline and Johannine literature in its earlier form; but as the fulfilment was delayed there was a gradual transformation. In the fourth Gospel, resurrection, judgment, eternal life become present spiritual reality rather than merely future external occurrence. In Paul we can trace a reaching beyond the Jewish eschatology. Fearing that he might not survive to the resurrection as in 1 Cor. xv. 51-52 he still hopes to do, he finds the assurance that to be absent from the body is to be present with the Lord, and that he will not be unclothed, but clothed upon with a habitation that is from Heaven (2 Cor. v. 1-8), and yet even here he anticipates the judgment of Christ on "the things done in the body" (verses 9 and 10). Even in this transformation of the doctrine the hope is not of a survival of the body by the soul, in a disembodied state, but the assumption at death of the spiritual body. As has already been indicated, for the Hebrew mind (in contrast with the Greek) man was body animated by the Spirit of God; and accordingly what was hoped for was a corporeal existence, the restoration of the whole man. The general character of this chapter forbids any more detailed study of the teaching of the New Testament.

(4) In the Christian Church this primitive eschatology has had a persistent life, but has from time to time been vigorously revived. The "orthodox" doctrine in Protestantism has generally been that what awaits the righteous at death is eternal bliss, while the wicked are doomed to eternal punishment; thus assigning to the moment of death what the early Christian eschatology connected with the general resurrection. Attempts at harmonizing by theologians, aware of the difficulty, need not now detain us. What has been written on the intermediate state is individual speculation, and not recognized doctrine. But in Roman Catholicism, there is the dogma of purgatory, a place in which the imperfect believer can be purified, and so prepared for heaven. The "orthodox" doctrine of eternal punishment has, however, been widely challenged. It is affirmed, on the one hand, on somewhat slender Biblical evidence that all men will ultimately be saved (dogmatic universalism); and on the other, by an interpretation of the New



CHRIST AMONG THE DOCTORS.



Testament teaching with unhistorical literalism, that only believers have eternal life, and that unbelievers cease to be either at physical death, or when their refusal of God's grace becomes final (conditional immortality). Before offering what seems to be the hope which reason can accept, and conscience can approve, though faith alone can sustain, the writer desires to survey what other religions and philosophy can offer.

(5) In Hinduism a large place is filled by the doctrine of transmigration. "Belief in the re-embodiment of human souls in men or animals is widespread among savages, and was doubtless nothing new in India. What is characteristic in the Upanishads is that man's character and lot in this life is determined by his deeds in a former existence, and that what he now does in like manner determines what he shall be in a future existence" (Moore's "History of Religions," vol. 1, p. 275). Deeds (*Karman*) determine destiny. This doctrine of moral continuity was in popular Hinduism vulgarized into a doctrine of automatic retribution in each life for the deeds of the former. Heaven and Hell become intermediate states in the successive embodiments. Escape from this cycle of destiny was sought in the discovery of the soul's identity with Brahman, or supreme deity. The earlier Buddhism retained the belief in this cycle of births and deaths, but did not admit the transmigration of souls, since for its psychology the soul was no permanent entity, but a temporary collocation of elements, formed at birth, and dissolved at death; the Karma alone passed from one life to another. The secret of Salvation was offered by Gautama in the doctrine of *Nirvana*, cessation of existence, or at least conscious existence, by the extinction of the desire to exist. In the popular later Buddhism the belief in transmigration was restored. Two features in these doctrines may be noted, the recognition of a moral continuity in successive lives, and the need of embodiment for full life.

The Egyptian mythology deals in great detail with the future life and the unseen world, and abundant and elaborate provision was made by magical texts and amulets for escape of "the many and varied perils of the tomb and the other world" (Moore, p. 194). Prominent as ancestor-worship is in the religion of China, involving the belief in continued existence, the Chinese mind is not imaginative enough to present to itself the state of the dead with any

definiteness, except their need of the services of the living. What Buddhism or Taoism attempts in this respect to supplement Confucianism has no distinctive significance. A sensuous imagination runs riot in the doctrine of Islam. It is not necessary to give further illustrations; but the data of the comparative study of religions justify the general statement that belief in the survival of death, in one form or another, is universal in mankind. Can such a belief be without any foundation?

(6) Greek religion and philosophy were both concerned with the question of the immortality of the soul. In the Orphic mysteries "the soul was regarded as a part of the divine, a *particulæ auræ divinæ* for which the body in its limited and perishable condition was no fit organ, but a grave or prison. The existence of the soul in the body was its punishment for sins in a previous condition; and the doom of its sins in the body was its descent into other bodies, and the postponement of its deliverance" (Salmond, "The Christian Doctrine of Immortality," pp. 109-110). Donaldsonth us translates part of an ode by Pindar: "By a happy lot, all persons travel to an end, free of toil. And the body, indeed, is subject to the powerful influence of death; but a shadow of vitality is still left alive, and this alone is of divine origin; while our limbs are in activity, it sleeps; but when we sleep, it discloses to the mind in many dreams the future judgment with regard to happiness and misery" (quoted by Salmond, p. 112, note 7). This interesting passage not only illustrates the dualism of Greek thought, as contrasted with Hebraic, but also offers a confirmation of the theory of animism in regard to the origin of the distinction between soul and body. Regarding the belief of Socrates the testimony of the "Apology" is ambiguous; but in the "Phaedo" a more confident expectation is assigned to him of the release of the soul from the body, and its departure to blessedness. Plato offers arguments of varying cogency but of the importance of the belief for him there is clear evidence. Among the Stoics there was by no means agreement on this question. The Epicureans sought to remove the hindrance to the enjoyment of this life in the fear of death by the assurance, "If we are, it is not; if it is, we are not." Greek thought has contributed to Christian theology the belief in the *natural immortality* of the soul apart from the body, and Hebrew the doctrine of resurrection, the restoration of the entire human personality.

(7) The historical survey need not be continued further; but we may now marshal the objections to, and the arguments for the belief. There are types of thought necessarily antagonistic. If life depends entirely on a material organism, mind or brain, then the dissolution of the body must involve the extinction of the soul. Materialism is, however, a discredited philosophy. In his book on "Life and Matter" Sir Oliver Lodge maintains that while life is different from matter and energy, it uses both for its ends. James in his lecture on "Human Immortality" assigns to brain in relation to thought not a *productive* but a *permissive* or *transmissive* function, similar to the relation of the musical instrument to the musician. What has been described as *Naturalism*, or the habit of regarding and estimating all reality from the standpoint of the physical sciences, offers another objection. Man as a part of nature is too insignificant to justify his claim to be an exception to the common law of the decay of all natural objects. Against this contention the positive arguments for immortality are valid. They assign to man permanent values which disprove the charge of any presumption in the claim to immortality. The *pessimism* which regards the present life as an evil, and not a good, must needs reject the hope of immortality; and desire "the restful rapture of the inviolate grave." But pessimism is the conviction of only a few thinkers of unhappy disposition, or in one or two cases even a pose of the disappointed in the pursuit of pleasure. It does not command any widespread assent. *Pantheism* must in consistency deny individual immortality; the only hope it can offer is re-absorption of the individual in the universal life, as the wave falls back into the ocean. This has been represented as a worthier desire than the hope of individual immortality, but to know, serve, love, and be blessed in fellowship with God appears a greater good both to God and man than thus to be lost in Him, or It, for Pantheism can hardly affirm a personal God. *Positivism* in the Religion of Humanity recognizes, not an individual, but a corporate immortality. George Eliot seeks to commend this in the lines beginning, "O may I join the choir invisible." All any man should desire is to continue as a beneficent influence through his words and deeds in human history. This, and much besides, is included in the Christian hope. Regarding human destiny as well as divine reality *Agnosticism* must affirm man's incapacity to know.

(8) The belief in immortality has sure foundations only where there is a belief in the personal values: truth, holiness, blessedness, love, which raise man above the animal level, and make him something other and more than a part of nature, and also where belief in God affords the guarantee that these values are not an accident in the universe, the chance products of man's evolution, but are the revelation of what is its essential reality. It is in the Christian religion alone that there is such an estimate of the value of human personality and such a conception of the character of God, and His relation to man, as gives certainty to the belief. Even if psychical research afforded convincing evidence of the fact of human survival, the argument which follows would not be depreciated as valueless; for it is only in this way that the value of continuance of life can be exhibited. Does man deserve immortality, and is the immortality he dares to hope for of such a kind as to make it in his moments of best personal life seem desirable?

We may begin by recognizing at the outset that immortality is desired and, with a solitary exception here and there, generally desired. This is itself significant. There are wishes so arbitrary, and casual, that we cannot infer from them that they will ever be met, or deserve to be met; but there are desires so deeply rooted in the nature of man that we are entitled to assume that they have some correspondence with reality. If man's organism has been evolved so as to be adapted to its environment, we may assume that his soul has also been developed in correspondence with an environment to which it can adapt itself. Just as sight has been evolved because there is light, and hearing because there is sound in the world around man, so has this desire for, and even expectation of, immortality been developed in man because he is in a universe so constituted that this is his destiny. If there be any reason or any right in the world, man's aspiration after immortality cannot be a mocking illusion. When faith in God makes the Universe luminous with meaning, and pregnant with value, there comes confident assurance:

"Thou wilt not leave us in the dust;
 Thou madest man, he knows not why;
 He thinks he was not made to die;
 And Thou has made him; Thou art just."



"AND THE SEA GAVE UP THE DEAD
WHICH WERE IN IT."

By LORD LIFGHTON, P.R.S.

The correspondence between organism and environment is a natural analogy of the divine justice.

(9) From the natural analogy we may pass to the metaphysical speculations about the nature of the soul. Leibnitz offers an argument based on his distinctive philosophy. The soul as by its very nature a single monad cannot be destroyed, and is, therefore, immortal. What death can alone do to it is to detach it from the monads which form the body. A much less known thinker Platner develops a similar idea: "If the soul is a force, in the narrower sense a substance, and not a combination of substances, then as in the nature of things there is no transition from existence to non-existence, we cannot naturally conceive the end of its existence, as little as we can anticipate a gradual annihilation of its existence." Against this kind of argument Kant argued that even if we cannot ascribe to the soul extension, division into parts, we can think of its possessing degrees of intensity, which may be lowered till it ceases to be altogether. This kind of speculation makes no appeal to our intelligence, as the categories of our thought are so different.

We can, however, restate the argument in such a way as will make it mean something for us. We do not think of the soul as substance, but as subject. Personality is the conception which dominates our thinking. As human personality develops, it gains consistency and unity; the multitude of impressions, impulses, appetites, emotions, is reduced to order within a system of intelligence, disposition and character. Man more and more becomes a self, and gains "self-knowledge, self-reverence, and self-control." He becomes less and less dependent on his environment, and more and more sufficient unto himself within himself. The outer life becomes less to him, and the inner more. He detaches himself from the visible and temporal, and attaches himself to the invisible and eternal. The sphere of the corruptible and mortal becomes less and less the realm of his interest and activity. The mind that can make the world to itself an intelligible system, can reach beyond the appearances to the reality which explains them, can rise above the actual to the ideal, is so little merely a part of the world, is so different in kind from it, that it need not be thought of as perishable with that world.

(10) The end of thought and feeling is action; and although

human action is free, it is subject to judgment in regard to its quality, its morality. The standard of morality is either a law or a good, the second being a wider conception, and inclusive of the first, but not as a means only, for the moral law is itself part of the moral good. The conception of law implies rewards of obedience and penalties for disobedience. In the present world, however, this connexion does not seem invariable. Despite the theory to the contrary (as illustrated in Ps. i., and assumed by Job's friends in their judgment upon him) the righteous do *not* always prosper, nor the wicked suffer. The common conscience assumes the necessity of a future life to redress this injustice. Kant's argument for the existence of God as a postulate of the moral consciousness is also implicitly an argument for immortality. God will in the future life harmonize character and condition. But if wickedness be its own greatest evil, and holiness its own greatest good, if sin is, as will be later suggested (in opposition to Plato's argument in the tenth Book of the Republic that sin does not destroy the soul as disease does the body), ultimately the destruction of personality, and virtue has the reward "of going on and still to be," then this argument rests on an external view of human personality and its destiny. More persuasive is the argument that as the moral task of perfecting personality is not completed here even by the ripest saint, there must be continuance under conditions favourable to completion, if the moral ideal has absolute value. This argument is one of Kant's postulates of the practical reason, and it carries conviction to every man who has moral vision, aspiration, and achievement.

(11) Man's morality is realized in society, but his relations to his fellow-men are not merely those of moral obligation; they are increased in value by personal affection. There are human relationships so superficial and external to personality that they involve no demand for, or assurance of continuance. But human love may become so intimate and sacred a bond between two developing personalities, and so essential a condition of the development of each, that the severance of the bond by death becomes inconceivable for the mind, and intolerable for the heart. It may be "better to have loved and lost than never to have loved at all," but to love itself there would be incalculable loss if it could not sustain the hope of immortality. The marriage of which Jesus said that it belonged to this earthly life alone was such a relation as the Sadducees had repre-

sented, not such a personal union, as itself anticipates the heavenly life (Mark xii. 25).

The conservation of these personal values depends, however, in the last resort, when doubt and fear assail, on faith in God. If God is, the human personality will conserve its values even in the experience of death; to be without God is to be without hope in this world, or for any other. The final assurance is that of religion. The saints under the old covenant may not indeed have reached the conviction that God's companions cannot be death's victims, because God will fulfil the promise of man's personal development, especially in this personal relation to Himself. But that was Jesus' certainty, as Son knowing and revealing God as Father. God is the God, not of the dead, but of the living (Mark xii. 27). All these arguments are not a support of a belief in natural immortality, but of the hope that by the rational, moral, social and religious development of personality, immortality may be achieved, and such a development the Christian faith alone makes possible.

(12) This may be called *conditional immortality*; and in some such doctrine science and religion may be found in accord, as Dr. J. Y. Simpson has sought to prove. The organism which adapts itself to its environment survives, that which fails to adapt itself perishes. The environment to which the human personality is called to adapt itself ultimately is God in His eternal perfection of truth, holiness, blessedness, love; if, and as, the adaptation goes on, immortality is secured, if it does not, and in the measure in which it does not, immortality is being forfeited. ("The Spiritual Interpretation of Nature," p. 319. Compare his "Man and the Attainment of Immortality" for a fuller treatment.) The Christian conscience is revolting against the doctrine of eternal punishment, the support of which in Scripture is altogether doubtful; it cannot affirm dogmatic Universalism, since God cannot compel any soul to be saved, and there may be some who will commit *the eternal sin* (Mark iii. 29) of final resistance to grace. The doctrine of Conditional Immortality, however, the Christian heart can accept only if two qualifications be added, that this earthly life does not exhaust the possibility of the achievement of immortality, and that God will exhaust the abundant resources of His grace to further its achievement in each soul. For the Christian believer eternal life has already begun,

and will be perfected hereafter in ever clearer vision of, closer communion with, and greater conformity to Christ (2 Cor. iii. 17, 18 ; 1 John iii. 2), until even the Son shall be subjected to the Father, that "God may be all things in all persons" (1 Cor. xv. 28).

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